THE

Lettsomian Lectures on Surgery

FOR THE YEAR 1862.

ON

PRACTICAL LITHOTOMY AND LITHOTRITY.

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No. I.—(*Continued.*)

THE manner of making the deep incision in the Lateral operation has at all times been a subject of great interest to the lithotomist, and demands our special attention. In our last it was supposed to be made with the sharp-pointed knife employed for the first incisions. Such appears, on the whole, to be the prevailing practice amongst metropolitan operators. Nevertheless, a great variety of instruments have been, and still are, employed for the purpose of attaining, as it is believed by those who advocate them, more safety and certainty. Two principles of construction—and two only—have been adopted in the numerous forms of knife, bistoury, or gorget, which have been invented from time to time in order to accomplish this end. The first has been to give the instrument, whatever its form or name, a blunt probe point, which shall run easily along the groove of the staff, and be incapable of doing mischief, if by chance it gets out of it. The other principle of construction consists in giving to the blade of the cutting instrument such a width as to determine the exact depth of the incision intended, so that this depth shall not depend on the will and manipulative execution exercised at the moment by the operator, but solely on the pre-arranged width of the blade itself.

These principles at once classify all these inventions, and reduce them to a position in which we can consider their merits. The instrument which illustrates the first class is the simple probe-pointed knife, or bistoury, and it is used by many of the best operators in order to make the deep incision, on the alleged ground of its complete efficiency and its superior safety to the sharp-pointed knife. But before exchanging his scalpel for this instrument, the operator is very careful that the opening made into the urethra upon the groove of the staff is sufficiently large to admit the probe-point easily, and he secures the opening with his finger-nail during the change. Provided this is accomplished, there is no possible objection to the use of the probe-pointed knife, and if an operator has a conviction that it is safer in his own hands than the sharp-pointed scalpel, he should certainly employ it. With regard to any liability to injure the bladder in the use of the scalpel, if it exists there can be no hesitation as to the propriety of adopting the guarded point. It is said that the opposite wall of a bladder has been perforated by the scalpel in lateral lithotomy; but in such a case its point must have been freely exposed in the bladder—an act which, under no ordinary circumstances, can form part of the operation.

To the numerous varieties of instrument designated by the term *gorget*, which illustrates the second principle of construction referred to, the probe-point also is always employed. Nevertheless the gorget has been condemned, mainly on account of an alleged liability to slip out of the groove, although it possesses the same guide which is believed to preserve the knife in its place. This discrepancy requires to be explained; and it is not difficult to do so. The slipping of the gorget is not necessarily due to inherent vice in the instrument, but to the particular mode of applying it which has usually, but not invariably, been pursued—viz., to the depressing of the handle of the staff by the operator's left hand at the precise moment when with his right he thrusts on the gorget to the bladder. Thus the groove in which the beak is destined to run is suddenly raised, and loss of contact is liable to result, especially if the left side of the instrument, like the first cutting gorget of Hawkins, had a convex shoulder. Cline removed this disadvantage, making the left side straight, and placing the beak at the end of it. Were the staff held firmly and steadily throughout, as in most modern lithotomy, the gorget would probably traverse it as safely and as certainly as the probe-pointed knife. A second cause of slipping existed in those gorgets, the cutting edge of which formed an obtuse angle with the back of the blade; so that the bladder was pushed before the instrument if it failed to cut. The famous charge, that "the gorget slips" made by John Bell, has done much to discredit an instrument with which we should not forget that some of the most successful practice in this country has been accomplished.*

The essential practical difference between the two instruments is this: that with the narrow-bladed instrument, or probe-pointed bistoury, the depth of the internal incision depends on the angle it makes with the staff when pushed through the prostate and withdrawn; while, with the gorget, the depth of the incision depends mainly on the breadth of the blade. That the wound shall not be too small is thus ensured, and it will not be too large unless the gorget is too wide, or is not kept as it enters the bladder closely in a line with the staff. Sir Benjamin Brodie used a probe-pointed knife, of which "the blade is broad enough to divide a considerable portion of the prostate as it enters the bladder, without its being necessary to increase the size of the incision by cutting laterally afterwards." This was really neither more nor less than a narrow-cutting gorget. John Hunter's lithotomy knife was wider still. The knife which Mr. Smith, of Leeds, uses constantly, and with great success, is a wide probe-pointed knife; he has four sizes, adapted to the requirements of different cases. Between all these broad knives and a well made cutting gorget of moderate width there is really no essential difference. Dr. Keith, of Aberdeen, uses a peculiar gorget; it is seven-eighths of an inch wide for ordinary cases, and for cases of enlarged prostate, an inch and an eighth wide. The peculiarity of his instrument is this: that its edge, made at first sharp by the cutler, is then slightly blunted with a file. It thus divides the substance of the prostate, through which it is pushed, but is quite incapable of incising in any way the coats of the bladder. But he makes the deep incision with the probe-pointed knife, and employs the gorget only to extend it, and to conduct the forceps. Through his kindness I possess the instrument which he has used in about 120 cases; its form is that of Cheselden's, as drawn in Heister's Surgery.

Mr. Crichton also employed the cutting gorget in a large proportion of his successful cases. He subsequently employed the probe-pointed knife, using the gorget still for cases of deep perineum and enlarged prostate. It is only fair to state that most of his worst cases were cut with it—those in which his success was so remarkable; and that he confessedly substituted the knife, rather on account of the outcry against the gorget than because he objected to the latter.

To the same principle of construction belong the *bistouries cachées* of all kinds; i. e., the depth of the incision depends on the breadth of the instrument, and is the fruit of pre-arrangement, rather than of the surgeon's judgment exercised at the moment of operation. The bistouric cachée and the cutting gorget, different as they are in appearance, are thus essentially the same in action: the gorget cutting the desired depth inwards by pressure; the lithotome cutting it outwards by traction. Only the gorget, owing to its tapered form, cuts rather less deeply at the internal extremity of the incision than at the outer; while the bistouric cachée cuts the same depth throughout, and consequently incises rather deeply the neck of the bladder—a fact of no small importance, and rendering, in my opinion, the gorget much the safer instrument of the two.

Blunt gorgets—that is, gorgets which have no pretensions to cut—are rather directors than gorgets in the sense in which we have been considering them. They are intended to dilate an *already divided* prostate, and to furnish a safe guide to the forceps in certain cases. It was in this light that Cheselden viewed the instrument.

Now with respect to the choice which may be exercised among these methods of making the last incisions, there is a certain ease and simplicity in the use of a single knife, the sharp-pointed scalpel, which has commended it greatly to modern surgeons; and unless there are some exceptional circumstances present, it must be admitted to be both a safe and convenient instrument. But, on the other hand, there are circumstances, and not unfrequent ones, in which the probe-

* Mr. Green cut forty cases with the cutting gorget (of Cline) without a single casualty. Cline himself was very successful. It was usually about three-quarters of an inch wide, and one inch for cases of enlarged prostate.

pointed knife is, I believe, superior. When the stone is large, and the deep incision must therefore correspond, the latter is a safer instrument for making it, since the point leaves the staff in that act.

When the perineum is deep, as in very stout subjects and in those with enlarged prostate, so that the finger cannot follow the knife into the bladder, I certainly prefer the probe-pointed knife for the last incision, as well as the blunt gorget to dilate it and conduct the forceps into the bladder. I adopted this method with advantage in the case of a gentleman aged sixty-nine, in November last, whose prostate was unusually large. I incised it with the probe-pointed knife, and finding myself wholly unable to reach the bladder with the finger, I passed the blunt gorget steadily onwards in the groove of the staff, and then the forceps in its hollow, when I at once encountered and withdrew the stone without difficulty. The patient made a good recovery. This has not been the only case in which I have found the blunt gorget extremely useful.

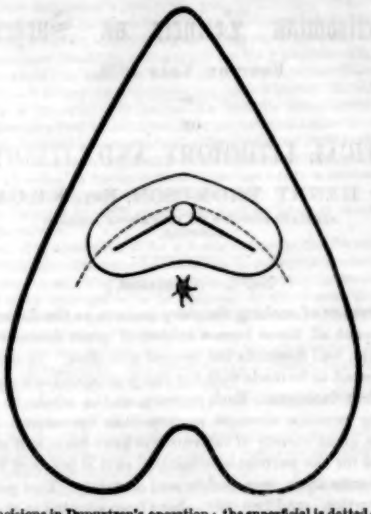
We must now consider, very briefly, other forms of lithotomy. For the problem has been presented for years, and is still presented with increasing force: Is the lateral operation the best mode in all cases of extracting through the perineal region a calculus from the bladder? That its results have not satisfied the expectations, or at all events the wishes, of many surgeons, is evinced by the numerous efforts which have been made from time to time, by the most experienced operators, to discover a better method. Witness the recto-vesical operation, the bilateral and the median operations, and the medio-bilateral of Civiale; to say nothing of the endless lesser modifications which have been many times proposed, forgotten, and reproduced. All of these appear to be the result of a conviction, which has gained ground during the last fifty years, that certain dangers incident to incisions made in the lateral division of the perineum may be avoided by confining the incisions mainly to the centre. It has been believed that severe hæmorrhage may be thus avoided—that the capsule of the prostate will not be divided, and consequently that the cellular interspaces between the pelvic viscera are less likely to be opened by incisions in the centre than on one side only of the perineum. Unquestionably it must be agreed by all that the anatomical necessities of the region demand that in the preliminary incisions of all perineal lithotomy, lateral or central, the upper and outer parts of the perineal space are to be avoided, and that the deep ones should be confined within the limits of the prostate gland. But there is another necessity, not an anatomical but a vital one, which must also be complied with, and it is no less important,—namely, the fact that the internal opening must be sufficiently free to admit the stone to pass without the exercise of so much force as to endanger the neck of the bladder. It is the clashing of these two opposed considerations which will always maintain a difference of opinion and of practice in lithotomy. One school will be most influenced by the dangers to which anatomy demands attention; another school will be most impressed with the vital injury which the tissues suffer when the incisions have been too limited. The difficulty is to reconcile them; to find precisely the safe medium of action. It must vary in different cases, and the judgment of the operator must decide the question in each.

It was under the influence of anatomical considerations that Dupuytren was led to devise his "bilateral" operation. To avoid the course of the pudic and its branches, the bulb, and the rectum, and, by two minor incisions springing from the central axis, to avoid any division of the prostatic capsule, he planned the procedure first performed by him in 1824. These incisions are seen in Fig. 3.

It was on similar grounds that Civiale practised a method which he describes in his "Paralléle" (1836). It is remarkable that this operation appears not yet to have been described in this country, especially considering its near relation to the median operation, and the fact that this has been so much discussed of late years. I have witnessed the successful performance of it in his hands; and have myself performed it in a case which occurred during the autumn of the past year, and which turned out exceedingly well. My colleague, Mr. Erichsen, held the staff; and I did the same for him a few days afterwards in a case of his own, in which he performed it also. It should be stated that, in the last edition of his well-known work,* Mr. Erichsen has suggested precisely this mode of operating as an improvement on the median, although he had not at that time put it in practice.

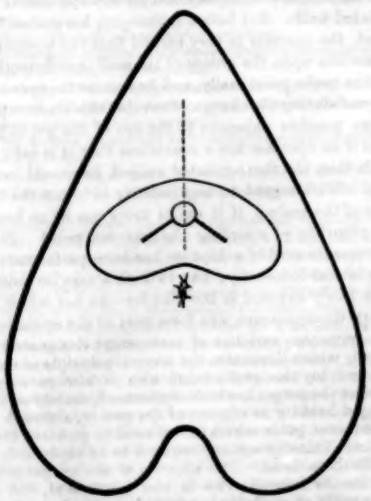
A staff with a median groove is introduced, and firmly held against the pubes by an assistant. An incision, about an inch and a half long, is made in the raphé of the perineum, in front of the anus, and carefully carried down towards the staff, endeavouring to avoid the bulb, until the membranous urethra is reached. This is opened by an incision sufficient to admit the end of a double-bladed lithotome, resembling that of Dupuytren, but straight instead of curved, into the groove of the staff. The lithotome is pushed steadily onwards into the bladder; then opened and withdrawn directly outwards in the middle line, dividing the prostate horizontally as well as the deep fascia in its course. The breadth of the internal or horizontal incision is less than in Dupuytren's operation, in which the two blades of the lithotome were extended so as to be an inch and a quarter to an inch and a half apart. Civiale advises that they should ordinarily be one inch apart, and never, or very rarely, more than an inch and a quarter. (See Fig. 4.)

FIG. 3.



Incisions in Dupuytren's operation: the superficial is dotted; the deep one is a black line. Their relations to the prostate and to the pelvic outlet are shown, the outer line indicating the latter.

FIG. 4.



Incisions in the medio-bilateral operation: the superficial is dotted; the deep one is a black line.

The Median method, known here as Allarton's operation, consists in a longitudinal incision in the raphé through all the tissues between the apex of the prostate and the skin, usually made

* Science and Art of Surgery. By John Erichsen. Third Edition. pp. 1020. London, 1861.

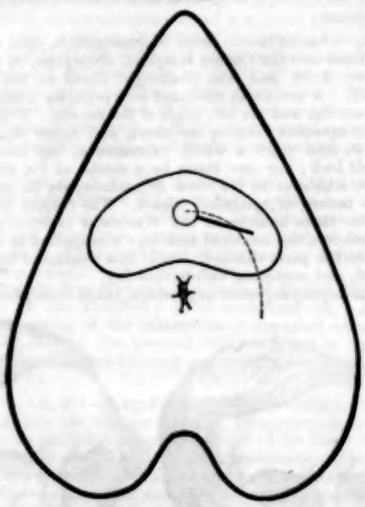
by transfixing with a straight bistoury, and cutting upwards. The operator dilates the neck of the bladder with his finger; and Mr. Allarton has recommended, if this be insufficient for the purpose, the use of Dr. Arnott's hydraulic dilator. A branched metallic dilator has also been employed, where the stone is large. It appears, however, very undesirable to use mechanical apparatus to dilate the structures at this spot, and I believe it to be far safer to make an additional section when necessary.

Of all the cutting operations for stone, it is unquestionable that the Median still presents that in which the bladder is reached with the smallest amount of section by the knife, and it appears to become dangerous just in proportion as injury by laceration, or over-pressure under the name of dilatation, is superadded to the incisions. These latter involve the bulb to a small degree, which is the only structure of importance divided by the knife besides the prostate, and this latter is only slightly notched at the apex in the ordinary mode of performing the operation. But when the deeper parts of the wound feel more than usually rigid and unyielding, or when the stone proves to be larger than was anticipated, it seems desirable to make additional incision for the purpose of affording more space. Unless this be done, the opening is certainly confined, and does not safely afford room for any but stones of moderate size.

After all, the anatomical axiom laid down at first must not be forgotten—viz., that any operation the incisions of which lie altogether between the anus and the symphysis pubis, even although aided by some lateral section, do not afford an opening sufficiently capacious for the safe removal of really large stones. Contrast the want of space in this part of the pelvic outlet, caused by the converging pubic rami, with the room which exists in one of its lateral divisions, and the truth of this assertion will be manifest.

Dr. Buchanan of Glasgow called attention in 1847 to the

FIG. 5.



Incisions in Dr. Buchanan's operation: the superficial is dotted; the deep one is a black line.

advantages of operating in the central part of the perineum instead of the lateral, and of employing a staff of rectangular form on which to make the incisions. This is introduced into the urethra, and by means of the left forefinger in the rectum the angle is made to correspond in situation with the apex of the prostate, so that the gland can be felt just beyond, between the finger and the staff; the latter being well depressed, the angle is brought near to the surface, and is readily felt in the perineum. The staff is then carefully maintained in this position by an assistant; the operator, keeping his finger still in the rectum, enters a bistoury opposite the angle of the staff, and therefore immediately in front of the anus; he holds it in his right hand with the palm upwards, the blade horizontal and its edge directed to his right; and he pushes it straight into and along the groove as far as the stop at its extremity. He thus enters the bladder at once, taking care to keep the blade parallel with the horizontal or grooved portion of the staff throughout the whole of the thrust. Next, he withdraws the bistoury slowly, and, as he does so, cuts outwards and downwards a distance rather more than equal to another breadth of his blade, and then directly downwards to the same extent, describing in this manner a curved line equal to about one-fourth of a circle round the upper and left side of the rectum, in which his finger still remains.

Thus far it is, as expressed by Dr. Buchanan himself, about equal to the half of Dupuytren's operation. If the stone is large, an incision made on the right side of the prostate has the effect of converting the proceeding very nearly into the operation referred to. But it is also easily capable of extension in another way; since if the incision by the side of the rectum and through the prostate be continued much beyond the extent described in the original direction, it becomes a lateral operation placed very low in the pelvic outlet. I have given it in some detail, because there is no description of it in our language: I am indebted to one from the French, kindly sent me by Dr. Buchanan, which, he says, is the best existing.

It is unnecessary to describe the remaining methods named; others have been omitted because not thought sufficiently distinctive in character to require separate notice.

THE POISONOUS EFFECTS OF CARBONIC OXIDE.

BY H. LETHEBY, M.B., M.A., PH.D., &c.;
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A GOOD deal of misapprehension seems to prevail respecting the poisonous action of carbonic oxide. On the one hand, accidents have somewhat recently occurred where in all probability the effects of the gas were entirely overlooked; and on the other, fatal consequences have been unjustly attributed to it. Some of this confusion is due to the circumstance that our standard works on poisons and medical jurisprudence have either omitted the subject entirely, or have discussed it in very meagre language. The recent catastrophe at the Hartley colliery, and the remarks which have been published respecting the supposed influence of the gas in causing the death of the men, have created an opportunity for a re-examination of this question.

Carbonic oxide was discovered by Priestley long before the close of the last century; and in 1802, Clement and Désormes, at the instance of Guyton Morveau, undertook a careful examination of its properties. They not only proved its chemical nature, but they also ascertained that it was a poisonous gas. Birds put into it dropped dead before they could be taken out; and when the experimenters themselves attempted to breathe it, they were attacked with giddiness and faintness. This experiment was repeated by Sir Humphry Davy in 1810, who says that when he took three inspirations of it, mixed with about one-fourth of common air, the effect was a temporary loss of sensation, which was succeeded by giddiness, sickness, acute pains in different parts of the body, and extreme debility; some days elapsed before he entirely recovered. It is, he says, fatal to animal life.

About the same time, the researches of Nysten demonstrated that the gas was capable of producing great disturbance of the system when injected into the veins; and although he concluded that the effects were of a mechanical nature, yet the accounts which he has given prove that the gas is a dangerous poison.

Later still, in 1814, the two assistants of Mr. Higgins, of Dublin, made experiments with it upon themselves, and in one case—that of Mr. Wilter—with almost a fatal result. Having exhausted the lungs of air, he inhaled the pure gas three or four times, and was suddenly deprived of sense and volition; he fell upon the floor, and continued in a state of perfect insensibility, resembling apoplexy, and with a pulse nearly extinct. Various restorative means were employed, but without success, until they resorted to the use of oxygen, which was forced into his lungs, and then his life was restored; but he was affected with convulsive agitation of the body for the rest of the day. He suffered also from violent headache, stupor, and a quick, irregular pulse. Even after mental recovery, he suffered from giddiness, blindness, nausea, alternate

heats and chills, and irresistible sleep. The other gentleman, after inhaling the gas two or three times, was seized with giddiness, tremor, and incipient insensibility. These effects were followed by languor, weakness, and headache of some hours' duration.

Since those experiments were made, others of a more extended character were instituted by Tourdes and by Leblanc. Tourdes found that rabbits were killed in seven minutes when they were put into a mixture of one part of the gas with seven of atmospheric air. A fifteenth part of the gas in common air killed them in twenty-three minutes; and a thirtieth part in thirty-seven minutes. Leblanc's experiments were made in conjunction with Dumas, and he ascertained that one per cent. of the gas in atmospheric air would kill a small dog in a minute and a half, and that birds were killed immediately in a mixture containing five per cent. of it.

Very recently I have myself ascertained that air containing only 0·5 per cent. of the gas will kill small birds in about three minutes; and that a mixture containing one per cent. of the gas will kill in about half this time. An atmosphere having two per cent. of the gas will render a guinea-pig insensible in two minutes; and in all these cases the effects are the same. The animals show no sign of pain; they fall insensible, and either die at once with a slight flutter—hardly amounting to convulsion,—or they gradually sleep away as if in profound coma. The post-mortem appearances are not very striking: the blood is a little redder than usual, the auricles are somewhat gorged with blood, and the brain is a little congested. In birds there is nearly always effusion of blood in the brain, and it may be seen through the transparent calvaria, by merely stripping off the scalp after death.

Accident has also demonstrated how injurious the gas is even to the human subject. For many years past attempts have been made to promote the use of water gas as an agent of illumination. The gas sometimes contains as much as thirty-four per cent. of carbonic oxide. It is obtained by passing steam over red-hot charcoal; and as the steam is decomposed by the ignited carbon, the hydrogen is set free, and carbonic oxide, with carbonic acid, is produced. Patents for this process of manufacturing gas date as far back as the year 1830, and they have at various times been put into operation in this country and on the continent. Selligue, in 1840, obtained permission to use the gas in the towns of Dijon, Strasburg, Antwerp, and two of the faubourgs of Paris and Lyons. At Strasburg an accident occurred which put a stop to its use. The gas escaped from the pipes into a baker's shop, and was fatal to several persons; and not long after an aëronaut, named Delcourt, incautiously used the gas for inflating his balloon. He was made insensible in the car, and those who approached the balloon to give him assistance fainted and fell likewise. The use of the gas has therefore been interdicted on the continent.

Another source of danger from it is in the combustion of carbon. It is found in the neighbourhood of brick-kilns and furnaces. The gases discharged from the latter contain it in large proportion. Iron furnaces produce it to the extent of from twenty five to thirty-two per cent., and copper furnaces from thirteen to nineteen per cent. In the year 1846, M. Adrien Chenol was anxious to ascertain the properties of the gases yielded by his process of smelting zinc ores with carbon; and, not having a suitable instrument for collecting the gases, he attempted to draw them out of the furnace by means of a pipette. Some of the gas was thus inhaled, and he fell immediately as if he had been stunned; the eyes were turned back in the orbits; the skin was discoloured; the veins were swollen, and presented a black tint under the skin; there were violent pains in the chest, and the brain felt powerfully oppressed. After removal to the open air, and the application of restoratives, sensibility gradually returned, but the internal pains were still severe, and there was a feeling of suffocation. For several days he felt depressed and languid; the digestion was bad; sleep was obstinate and heavy, and it was frequently disturbed by cramps in the knees and toes. Even for months afterwards there was a morbidly excited state of the nervous system.

In a more diluted condition the gas is still able to exert an injurious action, and it is very probable that the singular catastrophe which happened at Clayton Moor, near Whitehaven, in the summer of 1857, was caused by the diffusion into the air of carbonic oxide from the neighbouring iron furnaces. There is a row of cottages near to these furnaces, where, in the month of June, 1857, a number of persons were suddenly seized with insensibility, which soon passed, in some cases, into coma and death. About thirty persons were thus attacked, and six of them died. The effects were attributed at the time to the escape of sulphuretted hydrogen from the slag on which the cottages were built; but it is more probable they were caused by the oxide of carbon from the furnaces.

Lastly, it is worthy of remark that very recently Boussingault has noticed that the leaves of aquatic plants give off carbonic oxide and marsh gas, when under the influence of solar light; and he asks whether this gas so produced may not be concerned in the unhealthiness of marsh districts.

A more complete acquaintance with the effects of this poison is a great desideratum, although enough is known to indicate its general mode of action, and to furnish evidence for its discovery.

Finsbury-square, Feb. 1862.

CASES OF
CANCER TREATED SUCCESSFULLY WITH THE ARSENICAL MUCILAGE,

In the Brompton and London Cancer Hospitals.

BY W. MARSDEN, M.D.,
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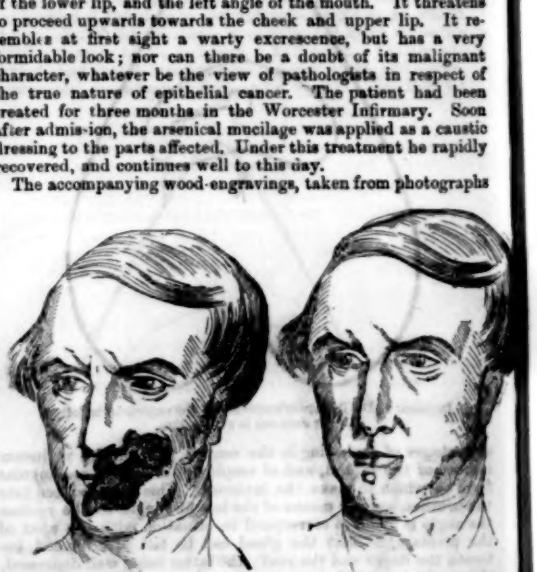
IT will be seen by the dates of the following cases, that they occurred some time ago. This delay in their publication was intentional on my part, in hopes of having it in my power to add to the history of the cases,—that most important of all results in the treatment of cancer,—that there had been no relapse; at least, for a long period. The mere recording of operations for this disease seems to me of little or no value, unless time be given sufficient to warrant at least a well-grounded hope that a relapse or return of the malady is not likely to occur.

CASE 1.—Charles M——, from Worcestershire, aged seventy, was admitted into the Cancer Hospital, Brompton, on the 13th of October, 1858, and was discharged cured on the 18th of May, 1859. A cancerous ulcerated sore occupies about a half of the lower lip, and the left angle of the mouth. It threatens to proceed upwards towards the cheek and upper lip. It resembles at first sight a warty excrescence, but has a very formidable look; nor can there be a doubt of its malignant character, whatever be the view of pathologists in respect of the true nature of epithelial cancer. The patient had been treated for three months in the Worcester Infirmary. Soon after admission, the arsenical mucilage was applied as a caustic dressing to the parts affected. Under this treatment he rapidly recovered, and continues well to this day.

The accompanying wood-engravings, taken from photographs



of the patient, give a very correct view of the patient before and after the treatment.

It may be useful to add, that the disease was of about eighteen months' standing at the time of his admission into the hospital. The arsenical mucilage was first applied on the 10th of November, and discontinued on the 16th of December. The progress towards a cure was uninterrupted.

CASE 2.—S. G——, aged fifty-six, married, and had had

two children, was admitted as an out-patient of the Cancer Hospital, Piccadilly, on the 15th March, 1859. The history of her case is as follows:—After a fall occurring about a year previously, there appeared to the left of the umbilicus and in the umbilical region a tumour, which, small at first, has now increased to about the size of an egg. The tumour is of a deep-red colour,

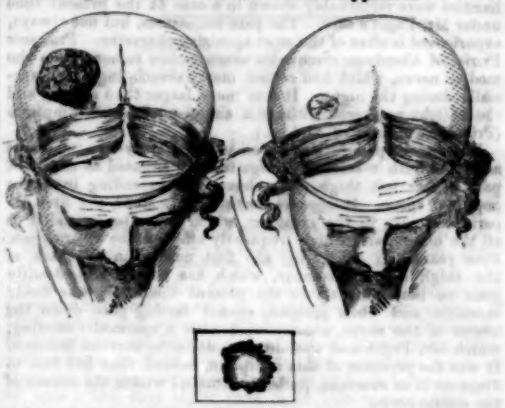
slightly ulcerated over the greater part of its surface. It is firm, and attached to the abdominal walls by a broad base or pedicle. As the means employed seemed to have no influence over the morbid growth, she was recommended to become an in-door patient in the hospital at Brompton. She was accordingly admitted on the 3rd of May, 1859. She enjoys pretty good health, and complains only of a sense of weakness in the limbs. After a few applications of the arsenical mucilage, the tumour sloughed off, leaving a clean surface, which speedily cicatrized, and she was placed on the list of out-patients on the 17th June of the same year. Soon after leaving the hospital this patient lost the use of the lower extremities, but from which she soon recovered. The cicatrix is quite sound, and she continues in good health, and without any relapse, to the present day.

In this case, as in all the others treated in the Cancer Hospital, the application of the arsenical mucilage was rigorously limited to the fungous structure, or, in other terms, to the diseased parts, experience having told me that to extend the application of the medicament to the healthy structures is a proceeding fraught with great danger.

The tumour thus removed is preserved in the Pathological Museum of the Hospital; it is numbered 56. A correct coloured drawing of the tumour, as it appeared when the patient first entered the hospital, will be found in the folio of pathological drawings forming a portion of the Museum; it is numbered 55.

CASE 3.—S. F——, aged sixty-eight, of Calston Colne, was admitted into the Cancer Hospital, Brompton, on Sept. 21st, 1859, for an epithelial cancer (cancroid) of the lower lip, which first appeared about ten months previously. His general health seemed good. The arsenical mucilage was immediately applied twice a day, and simple soda powders were prescribed to be taken also twice a day. Under this treatment the fungous growth was speedily thrown off, the secretions from the surface became of a healthy character, and on the 5th of October the black lotion was substituted for the arsenical mucilage. He was discharged cured on the 14th October, 1859, and continues well to this day.

CASE 4.—M. N——, aged seventy-one, was admitted into the Cancer Hospital, Brompton, on the 20th of June, 1860, for a fungous tumour, of the size of a small apple, seemingly growing from the scalp, close to the fronto-parietal suture, and somewhat towards the right side. To this tumour, which appeared to have no cranial or dura-matral attachments, though strongly resembling such tumours, the arsenical mucilage was applied with great caution; and, when the pedicle, which was of considerable breadth, had nearly sloughed through, it was divided with the knife on the 1st of August. No hæmorrhage followed. The bone was found bare and denuded of the pericranium for about the extent of a shilling. Granulations of a healthy character spread over the wound, and a healthy cicatrix ultimately formed. A small red spot marks the original situation of the tumour. On the 12th of October last she had continued quite well, nor has the disease reappeared.



The wood engravings give a very accurate idea of the tumour as it appeared before operation, of the scalp after its removal, and of the small red spot which remained on the scalp. The tumour and the original drawings are preserved in the museum of the hospital. It is right to remark that the growth resembled very strongly those terrible tumours which, growing from the external surface of the dura mater, terminate by perforating the cranium and spreading over the surface of the scalp.

Lincoln's-inn-fields, Feb. 1862.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

LARGE NEUROMATOUS TUMOUR IN CONNEXION WITH THE SCIATIC NERVE; SUCCESSFUL ENUCLEATION.

(Under the care of Mr. PAGET.)

FOR the greater part of our knowledge upon the subject of neuroma the profession are indebted to Dr. R. W. Smith, of Dublin, whose important work on this form of disease is, we may correctly assert, the only standard authority upon it. By the term neuroma is meant a tumour growing upon or in connexion with a nerve. It is not necessary that it should actually consist of true nervous tissue to constitute the disease; but very commonly the fasciculi of the nerve either surround the tumour or become spread over it. Some good examples of these growths have been exhibited before the Pathological Society during various sessions, and descriptions published in its "Transactions." Mr. Shillitoe exhibited one, of the musculo-spiral nerve (vol. ix.); Mr. Sibley, one of the fifth and sixth cervical nerves, and another of the musculo-spiral nerve (vol. viii.); Mr. Toynbee, one of the auditory nerve (vol. iv.); Dr. Wilks, specimens affecting the nerves of nearly every part of the body, one as large as a pigeon's egg on the sciatic nerve (vol. x.); and lastly, one on the posterior tibial nerve was exhibited by Dr. Van der Byl (vol. vi.)

The tumour varies in size from that of a millet-seed to that of a melon, and is commonly found to be solid and composed

of fibrous tissue; occasionally, however, when attaining large dimensions, a series of cavities may form within it, containing a yellowish or brown-looking fluid, which is attributed to the disintegration of central portions of the mass. These peculiarities were remarkably shown in a case at the present time under Mr. Paget's care. The pain sometimes, but not always, experienced is often of the most agonizing character. Professor Pirrie, of Aberdeen, removed a neuromatous tumour from the median nerve, which had caused most excruciating pain, especially during the night. It was much larger than an egg, and the patient recovered without a single unpleasant symptom. (Principles of Surgery, 2nd ed.)

Mr. Paget's patient was a woman aged sixty-two, who was admitted with a tolerably large tumour situated at the back part of her left thigh, just above, but extending into, the popliteal space. It appears that six years since, she first experienced pain in the great toe, which soon after extended to all the others, and which frequently affected the entire limb. Five years and a half ago she first noticed in the back of the thigh a small tumour, which has slowly and steadily gone on increasing up to the present time. It was freely movable, and when grasped, caused darting pain down the course of the nerve, accompanied with a spasmodic starting, which Mr. Paget said was almost peculiar to nervous tumours. It was the presence of this symptom, indeed, that led him to diagnose it as neuroma, probably situated within the sheath of the sciatic nerve.

As the patient's general health was otherwise pretty good, on the 15th of February chloroform was administered and an operation commenced for its enucleation. After making a sufficiently long incision through the skin, and dividing a few superficial muscular fibres, the tumour readily came into view; and on cutting a thin sheath of it, which most probably represented the expanded neurilemma, its true nature became more apparent, for a number of fibres of the great sciatic nerve were seen spread over its circumference, and at the upper part they formed a large sheath. On dividing this sheath, Mr. Paget was enabled to dissect all the fibres away, and to leave the nerve intact; the tumour was thus cleanly removed without any invasion of the integrity of the nerve. There was no bleeding. The edges of the wound were brought together, and a light bandage applied over the limb.

The tumour was divided across, and presented a mixture of soft brownish-yellow substance, mixed with numerous cysts, containing a dark, oily-looking fluid. In general appearance it was not unlike cancer, or a large disorganized kidney.

Since its removal the patient has experienced no unpleasant symptoms; there has been no numbness nor other special sensation to indicate any loss of functional power of the nerve itself. The wound is healing, and there is every probability of the case ending in a good recovery.

A case somewhat similar to the foregoing occurred in the practice of M. Velpeau: the neuroma was in connexion with the sciatic nerve, and by cautious dissection all the widely separated nerve-fibres were disunited from the tumour without the division of any of them. This, however, cannot always be done; and it then becomes necessary, when the tumour is accompanied with great pain, as in Prof. Pirrie's case already alluded to, to divide the nerve across, above and below the tumour. This is usually followed by paralysis of the part supplied by the affected nerve for a time; sensation, however, may ultimately return, as proved by the experience of several surgeons.

ST. GEORGE'S HOSPITAL.

PERINEAL SECTION AFTER DESTRUCTION OF FOUR INCHES OF THE PENIS.

(Under the care of Mr. HENRY LEE.)

J. M——, aged forty-four, was admitted into the above hospital on the 31st of December, 1861. In March preceding, extravasation of urine had taken place in consequence of stricture in the anterior part of the urethra. Incisions at that time were promptly made, but about four inches of the corpora cavernosa behind the glans penis sloughed and came away. The corpus spongiosum was also destroyed for the same distance. The glans penis remained.

As the wound left by so extensive a slough healed, the passage of the urine became more and more difficult. Several abscesses formed in the neighbourhood of the remaining portion of the urethra, and through these, when they burst externally, the urine escaped. As they healed, the difficulty of micturition increased until a fresh abscess, and thereby a fresh passage for the urine, was made. At the time of his admission into the hospital, some urine passed through an opening over the pubis, a little escaped in the perineum, and there was a slight oozing from a point just anterior to the scrotum. From this last named part all the urine passed for some time after the separation of the slough, but at the time of his admission it was so completely closed that a small probe could not be introduced.

The patient was brought into the operating theatre on the 2nd of January last. Mr. Henry Lee mentioned that it was useless, in such a case, to attempt to restore the urethra, as the mucous membrane was completely destroyed with the corpus spongiosum. There was no chance of any opening that was made remaining. It would certainly close, as all the openings had done before. Under the circumstances, the only means of restoring the patient to a comparative degree of health and comfort appeared to be to make an opening into the sound part of the urethra, behind the scrotum, and to keep this open, so that the urine might always pass through this channel. The patient might have to pass an instrument himself through this newly formed opening. When placed upon the operating table, the penis and scrotum were much inflamed and distended, the skin presenting a red and shining surface. The patient was placed in the same position as for lithotomy, the hands and feet being tied together. An incision was then made in the median line of the perineum; and the urethra, which was at a considerable depth, was reached by the index-finger of the left hand. A double-edged scalpel, guided upon the finger, was passed into the urethra. The index-finger being retained in its position, a gum-elastic catheter was passed above it into the urethra, and so on into the bladder. The catheter was fastened in, and the patient sent to bed.

On the 3rd of January, the day following the operation, he had slept but little during the night, but was free from pain, and in good spirits.

7th.—The swelling of the penis and scrotum had increased, and the skin over the penis presented several spots of livid congestion. This was thought to depend upon some slight extravasation which had occurred previous to the operation. Free incisions were now made in the skin of the penis and scrotum, and the parts were kept constantly poulticed. The urine passed through the catheter, which had been kept in the bladder, freely.

8th.—Had passed a good night. There is a rather extensive slough of the skin upon the upper part of the penis; complained of cough.

12th.—Felt much more comfortable; slough was separating from the skin of the penis, and the swelling was subsiding. Catheter was withdrawn.

14th.—The slough had separated, and the swelling subsided. The patient felt quite himself again. A gum-elastic catheter was again introduced into the bladder, and allowed to remain.

GUY'S HOSPITAL.

SUDDEN DEATH IN A CASE OF AMPUTATION OF THE TESTICLE FOR MALIGNANT DISEASE.

(Under the care of Mr. DURHAM.)

THE following case, although of much interest from the short duration of the disease, is also worthy of especial notice on account of the suddenness of its termination without any apparently well-marked cause to account for it. We may remark, however, that possibly atmospheric changes may have had something to do with this, as many sudden deaths have recently occurred, both in hospital and private practice:—

A German lad, nineteen years of age, was admitted into the above hospital in December, 1861, with supposed cancerous disease of his left testicle, which had commenced only six months before his admission. Previous to that period he had enjoyed uninterrupted good health, and there was no hereditary predisposition to disease. The glands in both groins became enlarged, as also did the left testicle. He entered the hospital with the view of getting rid of both by removal of the testicle; the latter was very painful, and supposed at first to be affected with fibroid degeneration. The patient was most anxious to have the operation performed, which was done by Mr. Durham, the patient being under the influence of chloroform, on the 24th of December. On section, the diseased mass resembled scirrhus more than medullary cancer, although no

well-developed cancer-cells were found on a microscopic examination. In some parts the appearances were evidently those of soft cancer, yet there were no typical cancer-cells, but much fibroid tissue. There was no doubt entertained, however, of the malignant nature of the disease.

A few days after the operation (Jan. 5th, 1862) he complained of much pain about the abdomen. He rallied a little from this, and shortly afterwards was pretty well; but he had scarcely been left a few moments when he was discovered to be dead.

At the autopsy, the lumbar glands were found to be a mass of soft cancer, and clots were observed in the iliac veins, but nowhere else. The enlarged lumbar glands, which were not detected during life from the tenseness of the abdomen, were readily observed and felt immediately after death, before that cavity was opened. Nothing else abnormal existed. All the viscera were healthy. In this respect there is a resemblance to the case under the care of Mr. Pollock, recorded in our "Mirror" of Feb. 8th, p. 146, in which the patient became sick, and died in three days without any assignable cause, the post-mortem examination showing all the viscera to be perfectly normal.

WESTMINSTER HOSPITAL.

SMALL PEBBLE LODGED IN THE URETHRA OF A BOY; SUCCESSFUL REMOVAL.

(Under the care of Mr. HENRY POWER.)

THE notes of the following case were taken by Mr. Beadles, late assistant house-surgeon to the hospital:—

Charles B——, aged eight years, was admitted Dec. 16th, 1861, suffering from inability to pass urine, the result of the impaction of a small pebble in the urethra just in front of the bulb. It appeared that the pebble had been introduced on the previous evening by some boy with whom he was playing. It had caused him a good deal of pain during the night, for which he had had a composing draught administered; but he was better in the morning again, and made no complaint until four o'clock in the afternoon, when he found he could not micturate, and was immediately brought to the hospital.

Mr. Power made several attempts to extract the pebble with forceps, but failing in this, he made an incision over the pebble, which was held steady by an assistant, and extracted it readily enough. Water dressing was applied, and the patient kept quiet in bed. The greater part of the urine came through the wound at first, and two days after the operation there was a good deal of hæmorrhage caused by the boy's putting his finger into the wound, but this was readily checked by the application of cold.

The wound healed in a few days, and he was discharged quite well on the 1st of January, 1862. The pebble was of a cylindrical form, but irregular in its surfaces, and about a quarter of an inch long.

LONDON HOSPITAL.

ABSCESS OF THE NECK; DIFFICULT DEGLUTITION; RECOVERY.

(Under the care of Mr. MAUNDER.)

ESTHER W——, aged sixteen, was admitted into the hospital Jan. 28th, under the following circumstances:—Three weeks previously she experienced an attack of catarrh attended by hoarseness, which was followed by great swelling, pain, and increasing difficulty of deglutition. On admission, her neck was swelled anteriorly and laterally from the sternum to the hyoid bone, the natural elevations and depressions being altogether concealed, and she held her neck as though wearing a stiff collar. The integuments were firm, but somewhat œdematous at the upper extremity of the sternum; there was great pain, which was increased on pressure and on any attempt to bend the neck backwards. She swallowed even fluids with difficulty.

On careful manipulation, Mr. Maunder believed he detected deep fluctuation, and on incising the integuments and deep fascia in the mesial line an inch above the sternum, pus flowed freely. The patient could swallow with ease the same evening, and left the hospital on Feb. 4th.

It is just possible that the use of the knife prevented the abscess finding a mode of exit either into the trachea or the œsophagus. At first sight it would appear as if the abscess was either thyro-hyoid or sub-hyoid, but that could only have been determined positively by an examination of the patient at the commencement of the swelling in the neck. The difficulty of swallowing, hoarseness, and catarrhal attack, tend to favour the view of its sub-hyoid nature.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, FEB. 11TH, 1862.

DR. BABINGTON, PRESIDENT, IN THE CHAIR.

ON BRASSFOUNDERS' AGUE.

BY EDWARD HEADLAM GREENHOW, M.D., F.R.C.P.,
CONSULTING PHYSICIAN TO THE WESTERN GENERAL DISPENSARY, AND ASSISTANT-PHYSICIAN TO THE MIDDLESEX HOSPITAL.

THIS disease had first fallen under the author's observation during a brief holiday visit to Birmingham in the autumn of 1858, and he had subsequently been able on several occasions to investigate its history and causes in Birmingham, Wolverhampton, Sheffield, and Leeds. The symptoms have, as the name implies, some resemblance to an imperfect paroxysm of ague; but they differ from it in this respect, that the paroxysms occur irregularly, and are distinctly traceable to exposure to the fumes of deflagrating zinc. The attack commences with malaise, a feeling of constriction or tightness of chest, sometimes accompanied by nausea. These always occur during the after-part of a day spent in the casting shop, and are followed in the evening or at bed-time by shivering, sometimes succeeded by an indistinct hot stage, but always by profuse sweating. The sooner the latter follows the setting in of the cold stage, the shorter and milder is the attack, and the less likely is the caster to be incapacitated for work on the following day. Headache and vomiting frequently, but by no means always, accompany the attack, which at the worst is only ephemeral; but the attacks are sometimes of frequent occurrence. Persons who have but lately adopted the calling, or who only work at it occasionally, and regular brassfounders who have been absent from work for a few days, are more liable to suffer from this disease than those who work at it continually. The men themselves attribute this disease to inhaling the fumes of deflagrating zinc, and there can be no doubt that their opinion is correct; for, on the one hand, several other classes of operatives are habitually exposed while at work to conditions exactly similar to those of the brassfounders, except the liability to inhale the fumes of zinc, and yet do not suffer from this ailment; and, on the other hand, brassfounders suffer from it in almost exact proportion to their liability to inhale these fumes. The results arrived at by the author of the paper are—

1st. That brassfounders, and, doubtless, other operatives exposed to the fumes of deflagrating zinc, are liable to suffer from symptoms resembling an irregular kind of intermittent fever.

2nd. These symptoms consist of malaise, listlessness, aching of the limbs, nausea, headache, and shivering, with occasionally vomiting, followed sometimes by febrile reaction, but always by profuse sweating.

3rd. The severity and frequency of the attacks are much influenced by the regularity with which men work in the casting shops, those who work steadily at the occupation appearing to acquire a tolerance of the poison, which is, however, only temporary, seeing that after a few days' absence from work even the most seasoned casters are apt to have an attack of the metal ague on being again exposed to the fumes of deflagrating zinc.

4th. The severity and frequency of the attacks depend mainly upon the quantity of zinc fumes evolved into the atmosphere of the casting shops, those men who mix the metals, and especially those who use a large quantity of zinc in their castings, being much more liable to suffer than those who merely remelt brass bars, or make brass containing but a small proportion of zinc.

5th. Any cause which tends to retard the dispersion of the fumes into the atmosphere,—such as a close, ill-ventilated workshop, or foggy weather, or a high wind that beats back the fumes into the shop,—increases the liability of the casters to suffer from metal ague.

6th. Although the cold stage is usually preceded by well-marked prodromata, slight causes, such as getting into a cold

bed, or any trifling derangement of the health, are apt to excite a paroxysm of brassfounders' ague in persons already predisposed to it by habitual exposure to the fumes of deflagrating zinc.

7th. Operatives, such as makers of galvanized iron-ware, who work over molten zinc below the temperature of deflagration, enjoy an entire immunity from this disease.

The PRESIDENT said that from the evidence adduced by the author it would appear that the effects produced by the internal administration of preparations of zinc were different from those arising from exposure to the fumes of the metal. A physician once told him (the President) that persons who took preparations of zinc for a long time became at length very white. This he had never found to be the case, although he had given zinc in very large doses.

Dr. MARCET said he was much interested in the investigation of the action of zinc. He had given the oxide of zinc to many patients, in large doses, and had never found that any bad effects followed. One patient, an epileptic, in seven months took one pound. He did not suffer from the remedy, but the epilepsy was not cured. The largest quantity taken in one day was seventy grains.

The PRESIDENT said that he had given sulphate of zinc in doses of two scruples three times a day to persons under adult age, beginning at first, however, with very small doses. He had averted epileptic fits for two years.

Dr. MARCET remarked that in such patients sulphate of zinc produced no sickness, but it did not agree so well with females.

Dr. STEWART said that the author's description of the attack called to his mind a case, which occurred many years ago, of an organ-pipe maker. In this case he believed that in all probability the disease had arisen, as Dr. Greenhow suggested, from exposure to the fumes of zinc in melting the metals—of which zinc was one—for the organ-pipes. The patient suffered so much that he gave up his business, but the high pay attracted him back to it. His health, however, again failed, and he died. He (Dr. Stewart) had often given zinc internally, without witnessing any bad effects from it.

Dr. GREENHOW said there could be no doubt that the disease he had described was attributable solely to exposure to the fumes of zinc. The testimony of the men into whose cases he had entered was so uniform, that there was no possibility of error. According to some French authors, the fumes from deflagrated zinc consisted of the metal in a vaporized condition. He could readily believe that the effects produced by zinc administered internally might be very different. In reply to one Fellow, who suggested that the symptoms might be produced by the fumes of arsenic, which was known to be often mixed with the zinc, he said he felt convinced that the effects produced were proved by the facts to be due to the zinc.

Reviews and Notices of Books.

Ten Years of Operative Surgery in the Provinces. By AUGUSTUS PRICHARD, F.R.C.S. Part I. London: Richards. 1862.

Report of Clinical Cases treated during the Sessions 1858–61. By JAMES SPENCE, F.R.C.S.E. Edinburgh: Oliver and Boyd. 1859–62.

THE large experience and ample skill of the surgeons who fill the posts of honour in the provincial hospitals are hardly so fully illustrated in our professional literature as they deserve to be. The cases published from time to time in the columns of this journal show how thoroughly the latest refinements of practice are appreciated, and how ably they are often applied, by country surgeons. It is to be regretted that they do not always adequately represent themselves in the republic of medicine; for we are persuaded that, from modesty, from love of ease, or from absence of ambition, many of the ablest physicians and surgeons in the kingdom, presiding successfully over large clinical wards, withhold unduly from publication the records of their practice. It is true that Mr. Prichard is not open to this charge, for he has not only published notes of his most important cases, but he has here recorded *seriatim* all his operations during the space of ten years. There is some want of judgment in thus heaping together pell-mell cases of interest with others which are quite unimportant; but the whole make up a *brochure* of value to the practical surgeon.

His cataract operations have been performed with a creditable success, but we think he might have obtained better results in the production of artificial pupil if he had not shown so marked a predilection for dividing the iris by a proceeding which is, perhaps, the least efficacious of any which may be employed.

In staphyloraphy Mr. Prichard has still something to learn, and especially that the application of caustic potash (p. 15) always causes a loss of substance. His experiences in tracheotomy are interesting, and confirm the objection which is generally expressed by the best operators against the use of the trocar, cutting forceps, and other "ready methods." No method can ever be so safe or so ready as the employment of the knife and tenaculum. Following the plan of Dr. Houston, of Dublin, practised by him in 1843, and recently "rediscovered" by a London surgeon, Mr. Prichard has, for a long time, treated hæmorrhoids by nitric acid very successfully.

Mr. Spence publishes annually a clinical *résumé* of the cases admitted into his wards in the Royal Infirmary, Edinburgh, which is extremely well worth reading. His practice of tracheotomy shows seven cases saved out of fifteen—important figures which we strongly recommend to the notice of those who discountenance the proceeding. Further records of the practice of British surgeons in this matter are greatly wanted, to help the settlement of the momentous questions at issue. In fifty cases in which Mr. Spence has performed excision of the joints, he has met with only one fatal result. Among the cases of urethral stricture is one which "affords an excellent commentary on the alleged 'rapid, safe, and effectual mode' of treating tight strictures by the application of potassa fusa." Here, while the natural passage remained so contracted as to admit with difficulty a No. 3 catheter, a canal had been tunneled into the rectum which admitted of a No. 13 bougie! Of two cases of perineal section in the session 1859–60, one had a fatal termination. In two instances of popliteal aneurism recorded, compression failed in each case, and the femoral artery was tied. The first yielded a permanent cure, but in the second pulsation recurred after a year. It remained to tie either the external iliac or the lower part of the superficial femoral near the sac. As the case did not seem very hopeful, however, Mr. Spence resolved to try first the plan of flexion of the leg upon the thigh. This plan fully succeeded, and the patient returned to his usual occupation of coal-carter, which required him to walk considerable distances. Mr. Spence's clinical comments on injuries of the head and the treatment of fractures are those of a judicious surgeon, and these records will be interesting to most practitioners.

Illustrations of Puerperal Diseases. By R. UVEDALE WEST, M.D., Vice-President of the Obstetrical Society of London. Churchill.

IN the small compass of eighty-four pages, Dr. R. U. West has presented a mass of sterling information that would freight an imposing volume. During a busy practice of twenty-eight years, including more than 3200 cases of midwifery, the author has been in the habit of preserving notes, more or less in detail, of all the cases of puerperal accidents and diseases that have come under his observation. The value of this practice has never been more clearly shown than in the collection of cases Dr. West has thus accumulated. Whilst each individual case carries special instruction, by the methodical arrangement of the whole under one view, each imparts a new value to the rest. The cases narrated are seventy-one in number. They carry the reader through, under a most instructive guide, nearly the entire range of puerperal diseases. In studying these histories, the practitioner will insensibly become impressed with, and assimilate, the views and experiences of the author. Beginning with the first case, one in which convulsions were followed by pneumonia, diarrhœa, fever, phlegmasia dolens, and gathering further illustrations as we proceed in the observation of cases of mania, diarrhœa, peritonitis, metritis, dysentery, in-

testinal fever, abscesses of the limbs, we are forcibly struck with the accumulating evidence which culminates in the demonstration of the proposition in which Dr. West sums up his views of puerperal fever. The particular conclusion in which all his experience and reflections centre, is to confirm the doctrine expressed by Caseaux, who says, that in puerperal fever we have to do with a disease which presents itself with lesions the most varied: sometimes a metritis, sometimes a peritonitis, sometimes a phlebitis; at other times a lymphangitis, a pneumonia, a pleurisy, a suppurating arthritis. This idea of puerperal fever is one, we believe, that has gradually found advocates amongst those who enjoy a wide sphere of clinical observation. In this excellent work we have the best of all commentaries upon the subject. The narratives not only give proof of acuteness and accuracy of observation, but also of that rare literary quality, brevity without obscurity. Many a man of less discernment, of less vigorous command over his subject, a less accomplished writer, would have eked out these materials, by redundancy of words and trite reflections, into a huge book, to the probable detriment of his own fame, and to the certain weariness of the reader.

As a work pre-eminently clinical, and of great worth, we earnestly commend it to the attentive study of every practitioner of midwifery.

Lectures on the Germs and Vestiges of Disease. By HORACE DOBELL, M.D. London: Churchill.

THE lovers of empty generalization, of pompous commonplace, and of mystic phraseology, may promise themselves a feast in the pages of this thin but indigestible octavo. There are writers who believe that they attain philosophical profundity in proportion as they conceal their thoughts in an unintelligible diction, and that they emulate mathematical accuracy by merely adopting the letters and formulæ which help to express briefly the precise conclusions of that science. Dr. Dobell is a pronounced specimen of this school. We will not pretend to follow him through the mazes of a sketchy argument in which he pretends to delineate the leading conditions of the existence of men, animals, fishes, and insects. For he has not cared to reduce his confused thoughts to such a distinct outline as admits of connected criticism; and the jumble of zoological cuttings upon Hydraformia, Echinoderms, Turbellaria, Setigera, Myriapoda, Lepidoptera, Orthoptera, and the rest, constitute an attempt to compel the reader to do the writer's work which we cannot condemn too strongly. Dr. Dobell apologizes for his chaotic and incomplete labours by pleading want of leisure. But we are far from feeling that there was any urgent necessity for the publication of the book, and he certainly would have consulted his reputation by delaying its appearance until he clearly understood what he wanted to say, and in what words he could say it. There is a wholesome condition attached to the "Porson prize," that the candidate shall append a Latin translation of his composition; and we cannot but feel that if Dr. Dobell had been compelled to go through a similar task, it would have had the advantage of enabling the reader to understand the book, and the author to understand himself.

It is clear, however, that Dr. Horace Dobell thinks he has some opinions which it is desirable that the profession should know, and we will therefore aid him, as far as we can, by transcribing some of what he states as his conclusions.

His first conclusion is, that all the processes of life are governed by a general law, "the law for the attainment of the ultimatum," and which he expresses thus:—"At every period of an animal's life, the force, or V. M. F., will be sufficient in every respect, and determined in that direction essential at the time to the attainment of the ultimatum, this ultimatum being understood to apply to the species." The V. M. F. is the Vitalized Mode of Force, and the L. M. F. is the Lifeless Mode of Force; and this barbarous jargon, aping the forms of logic, pervades all the book.

An animal, the author thinks, possesses a certain amount of V. M. F. when born into the world, and that his existence depends upon his possessing "*accumulators* of force and material." (He is very fond of capitals and italics—feeble typographical aids of mental obscurity.) This, he thinks, explains a larger number of facts concerned than any other theory, and brings into unison some which have appeared antagonistic. His application is, "that a certain amount of the force which has been accumulated and manifested in the process of life, passes on into the germs of a new generation; and thus secures the multiplication of the species, carrying on from generation to generation the impress of successive changes in the sources from which it is derived." It is difficult to suppose that the author is unaware that he is reviving, in uncouth verbiage, the oldest and most familiar of theories. There is, however, internal evidence in the book that Dr. Dobell thinks, in giving a hard name to an imaginary principle, and for ever afterwards speaking of it by its initials, he has discovered something; sometimes he seems to have deluded himself into the notion that he has proved something. But the age of mystification has passed. We have had enough of scholastic webs of words, and this book is two hundred years after its time.

New Inventions

IN AID OF THE

PRACTICE OF MEDICINE AND SURGERY.

NEW FEEDING CUP FOR THE USE OF INVALIDS AND CHILDREN.

THE above woodcut represents a new feeding cup for the use of invalids and children, which has just been patented by Messrs. Haelphen, of Paris. We have pleasure in drawing attention to it, thinking it will be found convenient in feeding patients in a recumbent position, as the flow of the liquid is perfectly controlled by the action of the valve. Messrs. Weiss, of the Strand, are the agents and manufacturers for this country.

A NEW ENEMA SYRINGE.

Dr. Spencer Thomson, of Barton-on-Trent, has suggested to Messrs. Maw and Son, Aldersgate-street, a simple but efficient syringe for administering nutritive or medicinal injections. The barrel is of glass, and is graduated so that the quantity introduced may be accurately measured, and its introduction watched and controlled. The instrument is very simple, cleanly, and well calculated for the purpose. It is one which will prove useful to most practitioners, and would be valuable in hospitals and public institutions where nutritive and medicinal enemata are frequently employed.

THE LANCET.

LONDON: SATURDAY, MARCH 1, 1862.

By the appalling catastrophe at the New Hartley Colliery, accounts of which were daily, nay hourly, read with such painful anxiety, not only by those who were in some way connected with the mine, but by the public in general, no less than 215 men and boys, as sturdy and as healthy as any in England, after being imprisoned for some days in the bowels of the earth, were suffocated. Such a loss of life, from any sudden accident in Great Britain, has not taken place since the rebellion of 1745. We can only compare it to a battle-field after an engagement, or the scourge of that dire epidemic disease, cholera.

The last act of this fearful drama has been concluded. The Coroner's court has sat and the verdict has been given. It is our wish to consider that verdict, and the evidence upon which it was arrived at. The verdict returned was, "that the men had died from the inhalation of gas." As this, and not the cause of the breaking of the beam, appears the question of interest in a medico-legal point of view, we will direct our chief attention to it.

At the inquest, it was stated by the Coroner that the inquiry would be a searching one; and Mr. KENYON BLACKWELL attended from the Home Office. Two points of great importance, however, appear to have been overlooked: no post-mortem examination was made of any of the bodies, nor was any of the air of the shaft collected for the purpose of analysis. This omission is especially to be regretted, seeing that two witnesses, in their evidence at the inquest, affirmed that the noxious gas was carbonic oxide, of the effects of which gas upon the human system we possess very meagre knowledge. In the account it is stated that Dr. RICHARDSON and Mr. BROWELL, two analytical chemists of Newcastle, visited the mine for the purpose of experimenting upon the gas. The evidence of these gentlemen was not taken at the inquiry. When we consider this, in connexion with the fact that no post-mortem examination of any of the bodies was made, we cannot refrain from expressing a decided opinion that a great opportunity of acquiring most valuable information has been thrown away.

The noxious gas was said to be carbonic oxide. Before we discuss the evidence upon which this supposition was founded, we may refer to some of the differences of the gases—carbonic acid and carbonic oxide.

CARBONIC ACID.	CARBONIC OXIDE.
Sp. gr.	Sp. gr.
1·529	0·967
Effect upon flame.	
A taper is instantly extinguished, if the amount be above 12 per cent.	Does not support combustion but itself burns with a pale-blue flame.
Sources.	
Respiration; combustion.	Imperfect combustion, generating carbonic acid.

The symptoms of poisoning by carbonic acid are those of a narcotic agent in which the poison is in the condition of a gas, and not of a solid or a liquid; and if the amount be in large quantity, or if the individual be kept a sufficient time in an atmosphere charged with it, death by coma will speedily ensue. The external post-mortem appearances are, chiefly, swelling of the head and face, with lividity of the same parts; the features are not often much distorted.

The reported cases of death by carbonic oxide have been few, and have been principally those from the inhalation of ordinary coal gas, where the carburetted hydrogen—also a very destructive gas—would be present. It is clear that no trustworthy conclusions can be drawn from observations upon a substance so complicated as coal-gas. We believe that the memoir on Carbonic Oxide contributed to the current number of this journal by Dr. LETHEBY contains nearly all that is known concerning the poisonous action of this gas. There is, however, abundant reason to conjecture that this agent is generated in large volumes during many manufacturing processes, and that it may have been the cause of many deaths which have been hastily attributed to other gases. An error of this kind is of far more importance than would at first appear to non-scientific persons. The determination of the means of preventing disease and death must in a large measure depend upon the antecedent possession of accurate scientific knowledge concerning the sources and causes. Now, upon the question whether the immediate cause of the death of this double hecatomb of victims were carbonic acid or carbonic oxide, may depend the lives of other persons exposed to mine-catastrophes. At any rate the course pursued in this inquiry, of ignoring that which was especially incumbent upon the Coroner's court to endeavour to ascertain—namely, the exact cause of death—is much to be deplored. It is not enough to trace out the remote cause. Nor is it always possible efficiently to trace out the remote cause, whether of negligence or more culpable conduct on the part of individuals, if we throw away so essential a link in the chain of evidence as is the immediate cause of death.

The evidence upon which the supposition was grounded in the case under discussion,—that the destructive gas was carbonic oxide,—was chiefly obtained from Mr. DAVISON, Surgeon to the Colliery, whose great devotedness and untiring zeal were most exemplary. He stated "that the men had been suffocated by "carbonic oxide gas, and that he had formed this opinion from "the blood which came from the bodies being of a red colour; "and that if death had been produced by carbonic acid the blood "would have been dark." When we consider the manner in which the bodies were brought to bank, by which blood would easily exude from the mouth and nostrils, and, when exposed to the air, would be readily oxygenated, we have a difficulty in agreeing with the opinion that the colour of the blood alone was a distinctive sign of death from carbonic oxide gas. The sufferers were imprisoned in a seam three feet high by twelve feet broad, and the lifeless bodies were found all near together, the first fifty yards from the shaft being completely covered. In this confined space the amount of air must have been small. When we remember that the quantity of carbonic acid given off in respiration and exhaled from the skin in a healthy adult in twenty-four hours, according to DUMAS, amounts to 28,912 cubic inches, and, further, that the poor prisoners were in this narrow hole several days, we are led to the inference that carbonic acid was the agent of death, and that the poor fellows themselves were unwittingly the principal source of this gas. This

inference is borne out by the effect of the air in the shaft on the heroic sinkers who were risking their lives to save those of their comrades. Some were brought to bank quite insensible, and remained so for some time; all, however, finally recovered.

The external appearances of the bodies were entirely in accordance with those of death from carbonic acid. "The "eyes of all were shut; their faces, with one or two exceptions, "composed and placid; many were much swollen in the head "and face, which parts were also very livid." The bodies were all found either sitting or in the reclining posture; none appeared to have struggled, and death seems to have come on gradually and tranquilly.

To return once more to the supposition that death was produced by carbonic oxide gas. Where did it come from? In evidence, it was stated that the furnace was found raked out. How could this gas have been formed if no carbon was present? Can the belief be entertained that it was generated from the bars themselves? We think not. We incline therefore to the opinion that carbonic acid, and not carbonic oxide, has caused this fearful loss of life.

We cannot leave the subject without saying that there is a melancholy interest attached to this sad occurrence; and if the above supposition be correct, that the poor fellows met their death from the inhalation of carbonic acid, this gas must have been, in the major part, given off by their own bodies; and we feel that if they had but known of the great danger of overcrowding, and had dispersed themselves into groups, some might have survived and been yet amongst us.

A Royal Commission has been appointed, including Dr. HEADLAM GREENHOW and Mr. P. H. HOLLAND, charged with the duty of inquiring into the condition of all the mines in Great Britain with reference to the health and safety of persons employed. Under this Commission it may be expected that accurate information concerning the sources of danger to that hardy race who, to minister to the comforts of the *dii superiores*, pass a large portion of their lives in Tartarean regions, will be elicited.

The fresh calamity at Merthyr strengthens, if possible, an overwhelming case for a thorough scientific inquiry into the hygienic condition of our mines. The question is not one simply of averting great catastrophes, involving in sudden destruction hundreds of men, but of so regulating the working, the ventilation, the lighting, and the construction of mines, and all the surroundings of miners, as to preserve their health by obviating those insidious causes which, constantly or occasionally acting, exert a pernicious influence. It appears to us that the Commission would be strengthened if one or two chemists were associated with it.

THE present is a day of "revised codes;" and among them we are happy at last to include the code of rules and regulations for the management of the District Lunatic Asylums in Ireland. It has not come one day before it was wanted, but rather a good many years after it was wanted, and urgently too. The code of Woolwich Academy, made for the government of riotous boys and applied to that of educated young men, was far less out of date than that laid down for the government of Irish asylums at a time when an asylum was held to be merely a strong house of detention and coercion, and which has continued to be their written law up to the present period, when asylums have everywhere become, in idea if not in fact, hospitals for the treatment of disease, and disease of a kind the treatment of which is powerfully influenced by the skilful exercise of medical authority. When the old rules were made which have just been rescinded, the duties of the resident officer of an Irish asylum were supposed to resemble those of the master of a workhouse or the governor of a jail; and he was accordingly required to exercise control over the conduct of the servants, to superintend the domestic economy of the establishment, and to hold the insane inmates in safe custody. He was appropriately designated the "manager" of the asylum. He was not a medical officer, and had no medical duties; but, inasmuch as even then the inmates of asylums were supposed to require some medical attention, a physician residing somewhere in the neighbourhood was attached to the institution, and was made solely responsible for the medical care and treatment of the patients. In the course of years, however, the medical and moral treatment of insanity as a disease became known and practised, and the authority of a resident medical officer in the Irish asylums was thenceforth a necessity. The old rules continued in force; but the Lords-Lieutenant, instead of appointing rude and ignorant men to the office of manager, have for many years been in the habit of giving these appointments to such physicians of character and ability as could be found willing to undertake the office; and for some time past the managers of nearly all the Irish asylums have been physicians, and able ones. Still, by law, they have only been managers; and although, practically, the moral and medical treatment of the inmates has for the most part slid into their hands, they have had no authority to attempt the medical treatment of the lunatics committed to their charge.

The way in which men do contrive to rub along under absurd and obsolete laws is wonderful—though, indeed, such laws soon become no laws; and as children play with the dame's dusty birch, or birds settle upon the familiar scarecrow, so an impracticable law becomes a byword of contempt. It is, however, not simply a neutral thing, doing neither good nor harm; for, as the QUEEN'S commissioners appointed to inquire into the state of Irish asylums reported on this very question four years ago, "there is nothing so calculated to "encourage a laxity of discipline and want of order in any "establishment, as that its officers should be allowed to regard "the regulations framed for their conduct and government as "a dead letter, deserving neither their observance nor notice."

There are, however, always to be found men, who, like SHYLOCK, will have nothing which is not "so nominated in the bond;" and while the physicians of other Irish asylums were managing to rub along, at the Maryborough Asylum these officers came to a dead lock, each appealing to the letter of the law which justified him. It is scarcely too much to say that, in the long investigation which took place into this matter, it was shown that, while the resident physician could not order a dose of medicine for a sick patient, the visiting physician who could order the medicine had no power to ensure the services of a nurse to administer it. This system of absurdity has now undergone a tardy and perhaps as full a measure of reform as could have been expected in Ireland, where, the *Saturday Review* says, nothing is done completely, but everything good or bad is "nearly so." Old abuses are never grubbed up, but chopped and lopped, leaving plentiful stumps for future stumbling blocks. The new rules accordingly do not provide the best system of

management, giving to each asylum two resident medical officers, one or other of whom shall never be absent from his post. They are, however, an immense improvement upon the old code; and we do believe that, under their sanction, the medical officers of the Irish asylums may, with gentlemanly forbearance and professional good-will, discharge their duties to their patients in a legitimate and regular manner. These new rules of the Lord-Lieutenant and Privy Council, "Given "at the Council Chamber in Dublin, the 16th day of January, "1862," promote the resident physician of the Irish asylums from the lay title of "Manager" to that of "Resident Medical Superintendent;" and, to a great extent, they lay upon his shoulders the duties and responsibilities of the latter office as they exist in England:—"He shall superintend and regulate "the whole establishment, and is to be entrusted with the "moral and general medical treatment of its inmates, for "whose well-being and safe custody he shall be responsible." The consulting and visiting physician, although, in conjunction with the resident medical superintendent, he must examine into the mental condition of the patients, is yet relieved from their moral and medical treatment *quoad* their mental disease. His specified duty is the treatment of the *bodily* diseases of the patients:—"He shall visit all patients labouring under "bodily disease, whose course of treatment he shall direct, "and any who are in seclusion or under restraint." The duty of the *general* medical treatment of the inmates is, therefore, placed upon the resident medical superintendent; while that of the bodily diseases of the patients is fixed upon the visiting physician. This can only mean that the superintendent must treat the patients for any general state of ill-health with which their mental disease may be supposed to be connected; while the visiting physician must treat them for *intercurrent* bodily diseases. To take an example: if a young woman were brought to the asylum with mania, dependent upon *suppressio mensium*, the superintendent would have to conduct her treatment as it relates both to mind and body; but if during her residence in the asylum she were attacked by rheumatic fever, the visiting physician would have to direct the course of treatment of the new bodily disease, which may, theoretically, be supposed to be independent of the general health.

So far as we can see into the mist, this is Lord CARLISLE'S distribution of medical duties; and so long as the physicians between whom they are divided shall fortunately be of one accord in thought and feeling, the arrangement may give no standing-ground for "a row." But his Lordship has certainly acted wisely in providing, by Rule 90, for misunderstandings in the mode of carrying out the duties of these offices, and in naming umpires. Difficulty must needs exist in determining the limits of general medical treatment, and of the treatment of bodily disease which is not general, although wise men will not be disposed to entertain any personal disagreement on this question. But suppose the man charged with the responsibility of the general health should object to the treatment of some particular bodily disease, what then? Suppose the superintendent should say to the visiting physician, "If you bleed "for this pneumonia my patient will run the risk of falling into "incurable dementia," which way would the umpires give it? Surely the dictates of common sense might have prompted Lord CARLISLE'S Privy Councillors to understand the absurdity of making two physicians separately responsible for different forms of disease in the same patient. Even the broad distinction of man's ailments into those which are medical and those which are chirurgical it is impossible to maintain with any degree of strictness; but to apportion the responsibility for the treatment of diseases in the manner indicated by these rules is—what shall we say?—Hibernian! Given two physicians, (which seems a necessary element in this Irish asylum question,) the only rational way would have been to have made one of them, the resident, wholly and solely responsible for the treatment, and to have made the non-resident purely consultant; and we have heard that such an arrangement was, in fact, proposed and urged upon the Privy Council by Dr. NUGENT, the able Inspector of Asylums, and by his colleague; and the best hope we can express is, that the system they recommend will practically and by force of circumstances be carried into effect. If a superintendent acts up to the ingenious device of the Privy Council, when one of his patients is attacked with bodily disease—let us say with inflammation of the lungs or intestines—he will send for the visiting physician; and the latter, when he has returned from his country visits, will attend and prescribe for the patient. The superintendent, not being a licentiate apothecary, which in nine cases out of ten he is not, is prohibited under heavy penalty from making up any medicine but his own (see Dr. NUGENT'S letter to Lord NAAS, 1858); the non-resident apothecary, therefore, will have to be sent for from the neighbouring town, and when he has dispensed the prescription the urgent bodily disease of the lunatic will be formally and legally brought under treatment. If, however, the superintendent is neither a man of tape nor of temper, he will in such an emergency pay little regard to Lord CARLISLE'S rules and regulations, but at once adopting the plan recommended by common sense, by humanity, and by the Inspectors of Lunatic Asylums, he will decide upon the treatment according to his best judgment, and see it at once adopted, dispensing his own medicines if need be; he will simultaneously take measures to inform his colleague, and when the latter arrives the two professional gentlemen will act in concert for the good of the patient.

Notwithstanding all faults and shortcomings, however, the new rules and regulations for the management of the Irish asylums are a great boon to an important public service. They are calculated to rescue an estimable body of men from a false and painful position. Received by the medical officers of asylums in a gentlemanly temper, and interpreted and enforced as they will be by Dr. NUGENT and his colleague in a wise and liberal spirit, they will tend to the welfare of the unfortunate patients for whose sake mainly they have been framed; and, so far as they go in reforming the absurdities of the old rules, they will promote the honour and usefulness of the profession.

Medical Annotations.

"Ne quid nimis."

THE HERBERT MEMORIAL.

RECENT public calamities have drawn so largely upon the liberality of the nation, that the subscription to this important object has been very much overshadowed. The meeting at Willis's-rooms, at the close of November last, was attended by perhaps the most distinguished assemblage of statesmen and public men that has been seen for many years gathered in this metropolis. Rarely have nobler examples of the eloquence of

our greatest orators been recorded than the speeches in which Lord Palmerston, the Bishop of Oxford, and Mr. Gladstone embalmed the memory of the virtues and achievements of Lord Herbert. It was resolved at that meeting to appropriate the subscriptions which might be received—first, to the erection of a statue of Lord Herbert in London; secondly, to apply the surplus to the endowment of exhibitions or gold medals in connexion with the Army Medical School at Chatham, which was founded under Lord Herbert's auspices. We believe that about £5000 have been received up to this time for these purposes. A fitting statue will probably absorb about £2000. There will thus remain a handsome balance to be invested in exhibitions or medals. It may be hoped, however, that the sum will yet be considerably increased. The subscriptions from the army have not been so freely and largely given as might have been anticipated from the recollection of the eminent and remarkable benefits which Lord Herbert conferred on that department. Since the reorganization of the sanitary staff which he initiated, the mortality of the British Army has actually been reduced at home and some foreign stations by fifty per cent.: the one death out of two that was held to be preventable has actually been prevented. The application of the principles which at the instance of the principal medical officers he thus adopted, has been further tested in the Chinese and Canadian expeditions with admirable and unexpected success. The thousands of lives saved, and the many more thousands of soldiers who profit in health, happiness, and morals by the schools, libraries, and recreation grounds of which he favoured the institution—these constitute the great testimonies of his successful labour. The continually gathering fruits of his work are in themselves *monumentum are perennius*. But it would well become the army to give the most striking and liberal proofs of its sense of the benefits which Lord Herbert secured for it at the expense of his own life.

POOR-LAW MEDICAL RELIEF.

THE reappointment of Mr. VILLIERS' Committee on the Poor-Laws should be the signal for those who take a real interest in ameliorating the position of the poor and of their medical officers, to assist Mr. Griffin in his task of setting before the Committee the grievances which require redress. The subject is one of vast importance to the State; for by the return of 1857, it was seen that in that year no less than 1,094,946 persons came under the care of the district medical officers, and it has been pretty clearly shown that 72 per cent. of all paupers are made paupers through sickness. The Poor-law Board have judiciously ordered that their officers shall possess both medical and surgical qualifications; but so often is this regulation disregarded that, in 1857, 632 medical officers out of 3307, or nearly a sixth of the whole number, had but one qualification of office. Again, the Poor-law Board have laid down rules as to the size and population of a medical district, limiting it to 15,000 statute acres, or 15,000 persons; but there are 583 districts exceeding the limit of 15,000 acres, and some even extend to from 80,000 to 100,000 each. Then still further to stretch illegally the labours of the medical officer, the guardians have arranged that 291 medical officers shall do the work officially allotted to 629, so that some have charge of as many as 40,000 persons. Then, while the population included in the returns has increased since 1841 from 13,762,353 to 20,061,725, the salaries of the medical officers have been reduced by £8858. The inequalities in payment are striking. There are 91 medical officers whose remuneration, including extra fees, averages less than 1*s.* per patient, the duration of sickness being between five and six weeks; a few receive as little as 3*d.* per patient; and 402 obtain as much as from 16*s.* to 18*s.* Thus there is an entire absence of system. These are some of the leading and most outrageous defects in the present system as it affects the poor. It may be hoped that the able advocate of the cause of improvement, Mr. Griffin, will receive due and public support in urging a reform upon the Committee. For since sickness is the nurse of pauperism, the nation is selfishly interested in the just and equitable arrangement of medical relief to the poorer classes.

SOCIAL SCIENCE IN 1862.

THE preparations for the meeting of the Social Science Association in the metropolis for the approaching season are being made on a large scale. The Reception Committee embraces a number of most influential names, and continues to receive accessions. A handsome subscription is being raised for the purpose of assisting in offering proper hospitalities to the distinguished guests who will flock to the metropolis from all parts of this kingdom and of Europe; and it is desired that the sum so collected may reach a figure of considerable magnitude, as indeed it probably will. The Association has now held five annual meetings, and branches have been established in Liverpool, Edinburgh, Bradford, and Aberdeen; and by the process of affiliation other kindred associations have allied themselves to its working. As a centre of social information it has rendered great services, while each of its meetings has left traces of usefulness in the great towns which have so generously welcomed it. "No department," says the general secretary, Mr. George W. Hastings, "has been productive of so much practical good as that of the Public Health. In every town which the Association has visited, our meeting has had the effect of directing attention to the proper construction of houses, the state of the drainage, the supply of water, and other matters of sanitary importance; and I believe that in every instance active exertions have followed for the improvement of the civic health. The few enlightened men, chiefly of the medical profession, who had previously to our meetings advocated sanitary improvements in any towns we have visited, have found their exertions materially aided by the impressions made during the discussions of the Association; and the municipal authorities have generally shown themselves willing to profit by the information laid before them." The volume of the proceedings of the last year, just published, contains papers on the condition and improvement of the public health which are of the highest value. Among them are contributions by Dr. M'William on the Health of Merchant Seamen, Dr. Richardson on the Registration of Disease, Miss Nightingale on Hospital Statistics and Hospital Diseases, Dr. Phelan on Small-pox in Ireland, Mr. Griffin on the Medical Relief of the Poor, and Dr. Milroy on Quarantine; all of which either have borne or are about to bear fruit in measures of the highest benefit to the health of the population. As regards the registration of sickness, quarantine, medical relief of the poor, and other similar select medico-social questions, this Section of the Congress will find in London ample scope and opportunity for useful action. The volume just published* is replete with information of the most important kind, which cannot be found elsewhere collected. We do not doubt that the sanitary physicians of the metropolis will take care that the Section loses none of its high character of usefulness by coming immediately within the sphere of their exertion.

MEDICAL STUDIES AT CAMBRIDGE.

WE have already referred to the main provisions of the new regulations submitted to the Council of the Senate by the Medical Board for the degrees in Medicine and Surgery of the University of Cambridge. In most of them we concur as being useful, intelligible, and in many respects an advance upon the rules hitherto in force. At a meeting of the Senate before the Vice-Chancellor on Monday last, Dr. Humphry took an objection in which he will undoubtedly carry with him the general assent

* Transactions of the National Association for the Promotion of Social Science. 1861. Parker, Son, and Bourn.

of the profession. The creation of the new degree of Master in Surgery is a proceeding accordant with that which has been done in other Universities, and is a liberal and judicious concession to the scientific character of the surgical art in the present day; and the admission of the Master in Surgery to the Senate gives academical value and importance to the degree, which will not fail to be appreciated. Dr. Humphry, however, objected to the candidate for this degree being called upon to "keep an act." This is, in reality, no test of ability and professional qualification; nor is the reading a thesis a test of any value in examining surgeons. The candidate will have already passed two examinations, and gone through all the necessary ordeals, and it will take from the popularity of the degree if he is obliged to come up from a distance, and undertake to go through a third ordeal of no practical value, and only entailing a waste of time and labour. Dr. Humphry has done good service in pointing out these considerations; for we are clearly of opinion that, out of Cambridge, they will act more prejudicially than the resident members of the profession there may at first imagine.

A LIMB OF THE LAW.

THE case of O'Reilly *v.* Carter has been before mentioned in these columns, and the first finding of the County Court Magistrate was, as we stated, in our opinion unjust, and delivered in ignorance of the difficulties of the surgical art. Carter had suffered under comminuted fracture of the leg, and recovered with overlapping and shortening. The County Judge of Bishop's Stortford, when Dr. O'Reilly called for remuneration of his services, decided that there had not been proper care, and the overlapping was due to unskilful treatment. However, he consented to grant a new trial, if the opinion of an eminent London surgeon should justify it. Mr. Fergusson was consulted, and had to examine the leg without communication with one or the other party, and without asking questions. He stated, in writing, that the shortening was precisely of that character which may occur with the best skill and care under certain circumstances, and from the general symmetry of the limb it was evident that proper skill and care had been exercised in the setting. This should have been sufficient, but unfortunately there were found six medical practitioners of the neighbourhood to appear in the box on the other side; and, in the face of the evidence of Dr. O'Reilly, the written certificate of Mr. Fergusson, and the statements of four other surgeons who were examined, they turned the scale of opinion in the minds of the jury against the medical attendant. The verdict is a monstrous piece of folly and injustice. How many of the patients of the most skilful surgeons in the world recover after comminuted fracture without shortening! In the face of the broad facts of this case, it was mere trifling with a sense of duty to talk of the efficacy of one pet splint for preventing shortening or another. These are questions for the surgical theatre, not for the justice-room. Medical practitioners should be cautious indeed before they go into the witness-box to condemn authoritatively the course conscientiously pursued by a professional brother.

A CERTIFICATE REJECTED.

THERE is no department of vital statistics which needs to be watched more carefully than the registration of deaths. There can be, and is, no question that the registration of causes of death by incompetent and uneducated persons fails to afford that essential information for the State which correct records furnish. Only completely educated practitioners can accomplish the task justly or in a manner useful to society. How true this is may be gathered from the fact that, according to the statements of the unprofessional persons employed by the Census Commissioners in Ireland to procure simultaneously returns of disease, it appeared that in all Ireland, on the night of the 31st of March, 1851, there was not one person labouring under St. Vitus's dance; only 4 were suffering from delirium tremens; only 16 from nervous diseases; only 14 from bronchitis; only 16 from teething; only 60 from hæmorrhoids; only 92 from dyspepsia; only 2 from diabetes; and only 4 from scald, though it is certain that considerably more than 2000 were suffering from scald that night. It further appeared from the returns, that "not a single person had died from syphilis in Dublin for a period of ten years," though the returns of the Registrar-General of England give nearly 3000 deaths by congenital syphilis in a period of seven years alone. Dr. Corrigan wisely pointed to these absurdities as evidence how little the returns of other than well-educated medical men can be trusted for the registration of disease.

But even in England we are still subject to the injury of certificates being frequently received by registrars from non-professional and unqualified persons, whose statements cannot safely be accepted as authentic. We rejoice always to see the necessity enforced for an authorized certificate from a qualified practitioner. For by rejecting irregular certificates, the practices of all unprincipled pretenders, who prey especially upon the poor, are checked, and often light is let in upon some of the dark results of their ignorance and malpractice. Thus by a strict system of registration the health of the public is doubly protected. This week, at Liverpool, an assistant of a chemist named Kirkus prescribed a draught for a child, who died next day. Whereupon he wrote a certificate that the child died from croup, and signed it "James Woolley, Ch." Now "Ch." may be interpreted "chirurgus" or "chemist," according to the fancy of the reader. But Mr. Buckmaster, the registrar for Toxteth Park, most properly refused to receive the document, and directed the mother to apply to the coroner's court. She went again to Mr. Kirkus's shop, and Woolley then took her to Mr. James Patten Hemphill, who, on his *ex parte* statement, gave him the following document, for which, it is stated, the poor woman gave the last half-crown she had in the world:—

"John Saunderson, aged two years, has been suffering from croup, and is reported to me to have died at three A.M., Feb. 13th, 1862. J. P. HEMPHILL, Surgeon.

"Feb. 13th, 1862."

This utterly valueless document did not fulfil the intentions of these worthies, for the registrar again refused it. Woolley was indicted for defrauding the poor woman of her half-crown. The whole case was gone into, and we entirely concur in the terms of reprobation which Mr. Raffles, the presiding magistrate, applied to the whole transaction. He said "the charge of obtaining money by false pretences failed, but not on the grounds put forward by Mr. Roby. There was no false pretence of any existing fact, but only a pretence that a party would do an act which was really worth nothing. The whole proceeding on the part of the surgeon and the chemist was not at all creditable to them, and was very improper. He was not at all clear if they were not both liable to be indicted for conspiracy—he was not clear with respect to that. He was astonished to hear a man of education say that the certificate was worth anything. He expected that whoever had got the half-crown would not only return it to the poor woman, but give her half-a-crown for coming there that day."

The attempt on the part of a surgeon to shield and protect an unqualified man by giving certificates for his "failures" is in the highest degree reprehensible. Mr. Hemphill sold his birthright for a very small mess of pottage. We hope that few will be found to imitate him.

ADULTERATION OF FOOD ACT.

THE utter inefficiency of the emasculated Adulteration Act which alone Parliament would consent to pass, becomes every day more evident by the results of the Analytical Sanitary Commission of THE LANCET, which shows how seriously and

extensively trade is still tainted with this dangerous fraud, while the provisions of the Act are universally felt to be so inoperative that no one is willing to run the risk of defeat in attempting to enforce its penalties. This has been strikingly exemplified in the City of London; and we were glad to see that, at a late meeting of the City Commission of Sewers,

"Dr. Abraham said that various complaints had been made in regard to the adulteration of food and drink; and that although the Commission had gone to great expense in fitting up a laboratory, and had invited the public to avail themselves of the Act, strange to say, there was not one case of the services of the Medical Officer having been called into requisition; and he thought it would be worthy of their consideration to ascertain in what way they could give force to the Act. He then moved 'That it be referred to the General Purposes Committee to consider and report to the Commission whether it is expedient to adopt any, and what, measures to give effect to the Adulteration of Food Act.'

"Mr. Deputy Elliott seconded the motion, and said he thought much good would come of it. If the public would not take care of itself, it was the duty of a public body like that Commission to take care of the public. Amongst the articles which were adulterated was milk, which was very bad. He sent some that had been supplied for his own family use to Dr. Letheby to examine, and he reported that besides being reduced by a certain quantity of water, the milk was likewise diseased, and he thought the Commission could not do a more patriotic thing than to make an onslaught on the whole of the milksellers through the length and breadth of the City the first thing.

"The motion was then put and carried unanimously."

THE INFLUENCE OF RAILWAY TRAVELLING ON PUBLIC HEALTH.

Report of the Commission.

VII.

WE have considered the things which concern safety in railway travelling and those which affect the comfort of passengers as demanding attention equally with those that influence their health. They tend to the same goal. For what produces mere discomfort in one person is a serious annoyance to another of greater susceptibility, and becomes absolutely detrimental to health in a third. And any cause whereby life is endangered has an obvious claim to be regarded as influencing health in a very pronounced manner.

Safety, health, and comfort of travellers.

In recording the general conclusions to which the present investigations have led, it is not expedient to follow exactly that order hitherto maintained, as such a course would involve unnecessary repetition. But, so far as may be, we will consider separately accidents whereby life and limb are endangered, with the means for their prevention; and the influence of railway travelling on healthy and diseased persons, with the precautions requisite for insuring the health and comfort of travellers.

PUBLIC SAFETY.—That impression which has already taken deep root in the public mind as to the faulty adaptation of railways to the requirements of passenger traffic has certainly not found any reassuring refutation in the evidence on which these reports have been founded, nor in the elaborate articles on Railway Management and its Control recently published in two of the Quarterly Reviews. It would appear, indeed, that the business energies of the management on many lines are more devoted to the development of excursion or goods traffic than to insuring the safety of passengers; and the latter fault has been carried to such an extent as to draw the following remonstrance from one of the Government inspectors of accidents:—

Sept. 6th, 1860.—"I am sorry to be obliged to state that this accident brings forward additional evidence that there is great laxity of discipline on the line. In making this statement, I am assuming that the directors, in issuing printed books of regulations, wish them to be observed. If they have no such wish, the sooner these printed regulations are thrown away the better. ..... This collision is another exemplification of the reckless way in which the lives of the public are risked; and the company appear to take more care of goods than they do of human beings."

Parliamentary interference.

But if there has been culpable heedlessness as to the welfare of the 163 millions of lives yearly entrusted to the charge of railway companies, it might be supposed that stringent laws would soon be introduced and passed by the Legislature to enforce attention to the safe conduct of this vast multitude of persons; that they would be protected by enactments bristling with penal clauses; and that the statute-book which throws its Ægis round pheasants and partridges, would also contain laws for the better protection of railway passengers. It is true there is legal provision for recovering compensation when injured by a railway accident; but of authoritative control for prevention of such accidents occurring, there is really none of any efficacy. We may refer in illustration to that great public loss which the death of Dr. Baly occasioned. No amount of damages could compensate for the destruction of such a life. Yet there is no line and no train to which a similar accident may not occur to morrow, so far as any preventive measures exist. As the strength of a chain is the strength of its weakest link, so the safety of a railway must be guaged by its most defective part, remembering that there is equal strain on all. It is the fable of Achilles with his vulnerable heel constantly exposed. For the death of Dr. Baly was due to an imperfect condition of the line. Its state was so bad as to produce an amount of oscillation which threw the train off the rails. To remedy such a state of things, there is, first, a Government inspection of the condition of the line; and secondly, a report by Government officials whenever an accident occurs. How these are practically disregarded by the companies, or openly defied, may be surmised from the following extracts from official reports to the Board of Trade:—

April 11th, 1860.—"This is the third case which I have had to report on in the course of the last twelve months, where railway companies have made alterations in their line, prejudicial to the public safety, subsequent to the sanction for opening being given by their lordships or the Commissioners of Railways."

Feb. 9th, 1861.—"The superintendent of the line said that the directors and officers of the Midland Railway Company considered that, with their large experience, they were far more competent to judge of the safest mode of conducting their traffic than any engineer officer, sent down by the Board of Trade to inquire into the circumstances connected with an accident, could possibly be. ..... I beg therefore to submit for their lordships' consideration the inutility of sending any of their inspecting officers to inquire into the causes of accidents on the Midland Railway. The recommendations of these inspecting officers may be met by the same kind of reply as was given on this occasion."

Railway indifference to Government representations.

The companies condescend to throw an occasional sop to Cerberus by making some trifling alteration which should have been so done as to prevent the accident; but in whatever concerns the wide issues on which life and death depend, they pay little or no attention to the most forcible representations of the Government inspectors. The large companies exert too powerful an influence to fear interference, and the smaller ones profess great deference to the main lines with which they are in connexion.

"In this manner, one powerful company, adopting vicious

modes of working, and setting itself against improvement, acts prejudicially upon the companies which work with it, affects other companies again through them, and, both by example and by practice, does injury to the whole railway system, and is the occasion of unnecessary risk to a large proportion of the travelling public."—*Government Inspectors' Report, Feb. 6th*, 1861.

The official reports go to the Board of Trade, and so into blue-books and oblivion. The Board of Trade is content to know that there are inspectors, and the work of protecting the public is supposed to be done when a report has been printed, even though that report, as is usually the case, points out the absolute necessity for enforcing precautionary measures. "The directors care more," we learn from good authority, "for a letter in the *Times* than for the most condemnatory report." The one influences the public and the traffic; the other no one reads but officials. And how these read and profit by the contents of these reports a recent parliamentary episode will best show:—

How not to do it.

In the House of Commons on the 14th of February, Mr. Bentinck asked the President of the Board of Trade, whether, in consequence of the repeated occurrence of railway accidents, it was the intention of Her Majesty's Government to introduce during the present session any measure founded on the Report of the Committee on Railway Accidents? Mr. M. Gibson said it did not appear, from the Reports made by the inspectors on recent railway accidents to the Board of Trade, that any new circumstances had lately arisen to render desirable the interference of Government in the management of railways.

Now, these are some extracts from the recent official reports referred to:—

May 30th, 1860.—"The suggestions of the inspecting officers and their lordships' urgent representations on the subject, though repeatedly made, are thrown aside as entirely impracticable."

Nov. 19th, 1860.—"Looking to the frequency of boiler explosions, it becomes a question for serious consideration whether it is not desirable that precautions should be enforced by law. If such precautions were properly enforced, these explosions would be as rare as they are now frequent."

Jan. 18th, 1861.—"Had the passengers had any means of communication with the guard in the van in front of their carriage, when they first became aware that something was wrong, they need not have been carried for miles under such circumstances of extreme peril. But it seems hopeless to expect that railway companies will do anything in this matter, unless the Legislature compels them to do so. I am afraid it is hopeless to expect any improvement, and I know that it is useless for an inspecting officer to continue to call attention to it."

Feb. 21st, 1861.—"If warning were taken from accidents of this kind occurring, not only on one, but on most of the railways in England, improvements might be introduced similar to those which have on some lines been adopted; but with the studied persistence in such a vicious system, the reports of the inspecting officers might almost as well not be made, as they appear to serve no other useful purpose than to give the sufferers in railway accidents, or their representatives, a clue on which to base their demands for compensation."

April 4th, 1861.—"The collision was undoubtedly the almost inevitable result of the vicious system of working, by which one train is allowed, in defiance of the company's printed regulations, to follow another at a distance of from 60 or 70 to 200 or 300 yards, and by the entire want of discipline maintained on the line, by which an engine-driver is permitted to disregard danger signals with impunity. If such regulations are allowed to be broken, and remain unpunished, when no accident occurs, as in the 99 cases out of the 100, they should not be appealed to in the 100th when some mishap takes place."

Sept. 21st, 1861.—"I am bound to say that rules, which are violated every day in the working of a railway, should be revised, as it is useless to appeal to rules when the practice is all against them."*

Railway diplomacy.

With a case so clear, and a need so urgent, it may seem strange that no independent member has endeavoured to introduce some protective and penal measure. But the subject affords no political capital, and there is no influential class to recognise the champion of their grievance. On the other hand, the political management on behalf of the railways is so cleverly conducted that no party, political or otherwise, ventures to suggest such legislative control as shall efficiently protect the public and throw responsibility where it should lie. For the extent of the influence exercised on behalf of what is known as the "railway interest" is so great, and the organization so perfect, that Royalty is the only estate of the realm not subjected to it. In the House of Lords, fifty railways have directors, who, necessarily, vote and speak according to the promptings of their colleagues. In the House of Commons, one hundred and twelve members are directors, representing one hundred and sixty-five railway boards. That some of them know little or nothing of railway management is clear; and it may, therefore, be expected that it is not for possessing such knowledge they are chosen as directors.

Wheels within wheels.

There are other influences also, of a far more mysterious kind. Enormous as is the amount spent in railway litigation, the "Parliamentary expenses," as they are called, include many sums of which the particulars are very vaguely set down. Up to the year 1857, twelve of the principal railway companies had spent between them upwards of five millions of shareholders' money—all included under the above vague heading. And the *Quarterly* thus alludes to the influences of which very long and careful scrutiny avails to reveal but a few of the ramifications:—

"The various companies command patronage, money, custom—all that confers power—to an extent previously unheard of in the history of associations. They have noble lords and honourable members for their active agents and astute rulers. They have opportunities of conferring advantages or of withdrawing them; of granting or withholding favours; of indulging in civilities, and of acquiring popularity, which they often employ to great advantage. United, they form a strong party in Parliament; separately, they have the issues of life and death pretty much at their disposal.

"To the tender mercies of this heterogeneous mass of companies are our 163 millions of travelling public turned over—a helpless mass. They are all, as a rule, equally ignorant of the condition of the engines and carriages, and of the line over which they are to pass; of the strength of the bridges, the efficiency of the signals, or the regularity with which they are worked; nor can they be aware of the thousand and one risks to which they are exposed."

Quarterly Reviewers' suggestions.

The *Review* articles referred to very fairly represent the uneasy condition of the public mind about railway management. Their conclusions as to the necessity for alteration coincide, but the means suggested differ widely. One insists on Government control; the other considers that a decided expression of public opinion would induce the necessary precautions to be taken. Now, we believe that these influences must be combined to produce any good effect. The pressure of public opinion may be efficient in inducing a temporary amendment; but when attention is diverted, the old course will be resumed. It is very evident, from what we have already stated, that legislative interference will never be attempted unless there is very strong pressure from without; but such control, once established over matters which concern the lives and health of railway travellers, would have the advantage of permanence and precision, and would define responsibility. But before any such authority is constituted, many a valuable life will be needlessly sacrificed; many a strong man's health will be crushed out of him, and the poor remainder of his life embittered by the effects of preventable railway accident.

Collisions.

Of 2136 persons killed and injured on railways during four years (1857–60), 289 cases were attributable to trespass or suicide, and 111 to accidents at level-crossings. These must be set aside as due to personal carelessness or folly. This would leave only 193 instances of

* All these dated extracts are from published reports of the inspectors appointed by Government, and whose great acquirements and judgment are acknowledged by all scientific men.

death or injury not attributable to collisions, against 1643 due to this latter cause, or seven-eighths of the whole number.

Their true cause.

This ready but most unsatisfactory method of referring to collisions as the cause of accidents, instead of examining what caused the collisions, induced us to make further investigations, and these led to startling revelations of the manner in which railway *employés* are kept continuously at work for periods beyond human endurance; and hence the lives of passengers are continually endangered. For the guard and driver on the train, with the signal-man on the line, are the Parcæ to whom the lives of all travellers are confided. Yet, as we have pointed out, after careful inquiry both at home and abroad, these men are worked for many hours beyond the time that their faculties remain equal to the imposed strain, and hence arise a large number of the collisions, with their fatal results. The men know it, and have striven against the regulations in vain. There is the certainty of dismissal on complaint, but no opportunity whatever of redress or appeal.

Their prevention.

To this unrecognised source of danger we at once directed attention, and shortly afterwards an edict was issued in France reducing the working time of railway *employés* from thirteen to eight hours per day; and woe be to the company who shall disregard the Imperial mandate! But as the only despotic power in this country appears to be that of the "railway interest," it will, we fear, be very long before any similar restriction becomes law among us. From inquiries of the men themselves, we are led to believe that they would cheerfully accept a fixed time of daily work even longer than that adopted in France; though one and all express the same significant wish for an occasional day of holiday and rest. They especially feel the hardship of making very long journeys without due intervals of rest between. From inquiries instituted on this point, we believe it to be especially important that there should be on every line (as already exist on one or two) a reserve of men, ready in case of sickness or urgency to undertake these extra duties, which are now shifted on to the first tired, hapless wight who may arrive in charge of a train.

Accidents from wheels.

A second most important cause of peril to life and limb through railway accidents is the defective construction of wheels. This has been again and again urged by Government inspectors when tires flying off has led to serious mischief; yet the companies pay little or no attention. Remedies for the evil there are many, and no less than seven for which patents have been obtained. Each of these new wheels is of such construction that the tire cannot well fly off suddenly; and the best of them has been adopted in the recently-constructed royal carriage. This wheel was, we believe, invented more than twenty years ago; and its merits are just now recognised, when the safety of the Queen demands extra caution. For it appears that the railway companies have hit on a plan for avoiding alterations, equally discreditable and ingenious. They are willing—so runs the argument—to adopt any efficient plans, but just wait until some perfect one is devised: and as there is no wheel-trade yet established with Utopia, life is still constantly endangered by the old arrangements. And here we come to another curiosity of railway management, little known to the public. The inventor of any patented article usually obtains reward for his ingenuity by a royalty on the sale from persons making use of his discovery. A number of ingenious improvements adapted solely for use by railway companies are yearly patented, and the system pursued towards the inventors is that, after approval of the plan suggested, it is determined to wait until the time of the patent expires before adopting it. Thus the old stock is used up and the royalty to the patentee saved; and though a few more preventable accidents may occur, yet the public are supposed to be used to being so treated, and the only anxiety is to keep the reports out of the papers, or to soften them as much as possible; hence the regular official letter which appears in the papers after such an accident, explaining that no one could possibly be to blame, and that the board are deeply grieved, &c.

SIGNALS.—A third cause of danger to the passengers, and one which requires legislative interference, is the inefficient and irregular system of railway signaling adopted on most of the lines. As on the correct management of railway signals depends the safety of every train and its occupants, it is important that signals should be simple, uniform, and accurate. Their establishment was one of the first necessities recognised as essential to safe traffic on railways, and it might be supposed that here at least the lessons of experience had been turned to practical account.

Sources of danger.

Why railway signals should be accurate needs no explanation. They require to be simple, because the men who tend them are necessarily not of the higher class of *employés*. And the signals should be uniform on all lines, because the signalmen, who, like guards and drivers, occasionally change from one company to another, may confuse the new and old regulations with disastrous results. This, unlikely as it may appear, is really an existing source of considerable danger. For a discussion is still going on as to the best system of signaling: whether it is preferable that the absence of the signal shall indicate danger, or that the line shall be considered clear unless the danger-signal be displayed. These two systems—called negative and positive—are employed by different companies; and thus what indicates immediate danger on one line may be the safety-signal on another. The apparatus used also differs on different lines, though the semaphore, with movable arms closing like the blades of a clasp-knife, is so generally adopted, and found so simple and efficient, that its use throughout the country might be advantageously made compulsory.

Use of colour signals.

But it is particularly important that the system of using coloured lights and flags for signaling purposes should undergo investigation and revision. The existence of colour-blindness among the men, with consequent inability to distinguish red (danger) from green (caution) can never be ascertained with that exactness which the risk demands. The affection is known to vary at different times even in the same person, and according to the distance of the coloured object; and men anxious to obtain employment would of course present themselves when at their best. It is well known to practical men that when an engine is travelling at high speed in the teeth of a sharp wind or through rain or fog it is difficult for the best eyes to distinguish the colour of a signal, especially if suddenly exhibited. Moreover, a red light, signifying danger, if seen from a distance, appears much further off than a colourless light side by side with it; and there is great reason to suspect that miscalculation of distance occurring in this way has caused several collisions. The eye, dazzled by the red glare of the engine fire on each opening of the furnace door, is unable immediately to recognise a small red signal or flag; but is liable, in obedience to the familiar optical law of successive complementary contrast, to see all things as if of a green hue. And the steam blowing off from the escape-valve (a medium through which the engine-driver often has to look) affects remarkably the colours of signals. Thus the white becomes of an orange-red; the green assumes a dull and altered tint; and the danger signal is so darkened when thus viewed that it is rendered almost invisible. It is also worthy of notice that the two colours, red and green, used on railways are the very worst which could have been selected: "At a distance they are mistaken by many who can distinguish them near. They are liable, when imperfectly illuminated, as in twilight, fogs, &c., to become altogether invisible; so that just when it is of greatest importance they should be seen, they are most liable to be misapprehended or not seen at all." *

Colour-blindness.

* Dr. G. Wilson on Colour-Blindness.

Other causes of preventable accidents.

There are two other fertile causes of preventable accidents which we believe also to demand legislative interference. One of these is the inefficient amount and action of the break-power supplied for arresting the momentum of a train. The other is the want of means of communication between guards and drivers. The Committee of 1857 recommended both these subjects as requiring attention, and the Government inspectors have again and again urged the necessity of some efficient control; but without any attention being paid to the recommendation.*

We have purposely confined our observations in reference to accidents to those varieties most prejudicial to public health and safety, and in which the necessity for immediate and decisive interference on the part of Government can be ascertained from official reports ordered and issued under Government auspices.

PUBLIC HEALTH.—The general and special influences of railway travelling as affecting health, and the remedies for those injurious results which we cannot hesitate to attribute to it, next claim attention. The effects differ in nearly every one of those persons who experience injurious results unmistakably attributable to the effects of habitual railway travelling; for there are very many, probably the majority, of travellers who feel little or no injurious effect from railway travelling, even though their journeys be almost daily and of considerable length. These represent a class of robust happy persons who are very dangerous in this, as in many other matters, to those more delicately constituted; for they boisterously pooh-pooh any attempt to remedy evils which they do not feel; and, by parading their own power of endurance, induce those who are less physically endowed to undertake what is beyond their strength.

Analysis of effects.

Those effects on health which are clearly traceable to the influence of railway travelling differ both in degree and in character; for although there are certain symptoms which are nearly always present, yet no two cases are precisely similar throughout. Now, setting aside for the present all persons suffering from local disease, we are enabled to recognise a certain class of symptoms which, from the manner and history of their occurrence, we are justified in considering as attributable to the influence of travelling on railways as distinct from what other modes of conveyance produce, and from the known effects of any casual complications, such as anxiety, dyspepsia, chilled extremities, retention, retinal impressions, and the like. The symptoms are manifested through the nervous system chiefly, or through those physical conditions which depend on the perfect physiological balance of the nerve-forces for their exact fulfilment. They vary (in persons of very similar constitution) from simple irritability, restlessness, and malaise after long journeys up to a condition of gradually supervening paralysis, which tells of insidious disease of the brain or spinal cord, such as, in its most pronounced form, follows on violent shocks or injuries to the nervous centres. These latter are the symptoms which frequently ensue from the vehement jolts and buffetings endured during a railway collision. And to the same cause, diminished only in intensity, may be also referred the less formidable group of symptoms. It is to this which the evidence and cases adduced in these reports point as the chief source of mischief, and that most detrimental to travellers. For each of those short, sharp vibrations felt in a railway carriage (and of which the number in every hour amounts to upwards of 20,000) resembles, on a small scale, the jerk and violent motion produced by a collision, from which it differs only in degree. The extent is so far lessened that the elasticity of the voluntary muscles suffices to maintain the equilibrium of the body against the disturbing force, so that it moves only with the motion of the carriage. But the nervous centres slung within their bony cavities have no such safeguard, as these latter move with the short sharp jerk which pervades the carriage. And the effect of this motion thus directly affecting their contents may be estimated when it is remembered that one of the most elaborate and beautiful adaptations among all the wonders which anatomy reveals is that which provides a series of successive springs, in order that the nervous centres may be always guarded from the direct effects of sudden jerks. But for such provision, every bound of the stag, every leap of the horse, would inevitably produce spinal concussion.

This lands us at the most important of all the causes which affect the health of railway travellers—one which is, in great measure, peculiar to this mode of travelling. It also points out the principle to be kept in view for remedying the evil,—whether general, as applied to all trains, so involving modifications of the present carriage arrangements; or individual, as applied to the self-protection of each traveller.

The causes of the peculiar jerking vibrations experienced in railway carriages have been already clearly set forth; and the means whereby their influence may be counteracted can be expressed in one word—elasticity—the natural antagonist of jerk. The provision of a sufficient intervention of elastic materials reduces the movement, which in a springless railway waggon is inconceivably distressing, to a gentle swaying motion. The springs of railway carriages, the horse-hair seats, (and the elastic floor of cork supplied to the new royal carriage,) are recognitions of the principle, which the habitual traveller may wisely extend for himself by many expedients, if he keeps in view what he has to attain—elasticity. The mats so successfully adapted for the Post-office travelling officials, made from thick sheets of indiarubber, set on edge as it were, and united like a honeycomb, are excellently suited for the purpose here indicated, and will be found greatly to add to the comfort of travellers if placed beneath the seat cushions. Other kinds of caoutchouc appliances will readily suggest themselves, but it is especially important to bear in mind that the chief source of the detrimental influences experienced by habitual travellers is the prolonged series of short jerks known as the "motion of the carriage," and that elastic intervention is the only remedy which it is in their power to apply; and if they place the cushions under-foot, pile the spare ones where they sit, or put up their feet on the seats, it is the fault of the companies in not providing that which competent authorities declare to be practicable—a system of transit free from the motions so unpleasant to all and so injurious to many. Persons who constitute the majority of habitual travellers are, for reasons already detailed, most likely to experience the latter effect.

Travellers' expedients.

The causes which interfere with such a desirable condition of smooth travelling as that described above, begin even below the rails, and extend throughout the whole construction of the carriage. In referring briefly to these, it will be also expedient to point out other defects and their obvious remedies.

The causes of injurious vibration and their remedies.

The ballast.

The sunken foundations (technically called the ballast) on which rest the sleepers, and the props or cradles that support the rails, chiefly give rise to the fine dust which in summer-time so soon covers a traveller. It is evident that this latter evil could be obviated by a smooth rolling motion, instead of that constant hammering during the passage of trains which now causes the dust to be driven up and to leave a space wherein the heavy sleepers, which should be rigid and motionless, can work freely; thus adding to the motion, and producing yet denser clouds of dust.

The dust.

The cradles.

The cradles which support the rails at short distances have the effect of wearing away the iron where it rests on them, until the rail works up and down in its bed as each train passes over it, thus producing its share of the jerking movement. In old and ill-kept lines this is very noticeable.

* Report from the Select Committee on Accidents on Railways.

The rails.

It may be doubted whether it is at all necessary that rails should be thus hung between props, instead of having such form and construction as to admit of continuous support on the foundations, like the street tramways. But assuredly the double-headed form of rail now employed is one perfectly unfitted for the heavy and continuous traffic which passes over it. Its form was adopted that it might be turned when the upper surface is worn. This was found (from the unequal wear of the rails already mentioned) so injurious, that the plan has been abandoned, under compulsion. Yet this shape of the rail, equally expensive and useless, is still retained, and even laid down on new lines.

The wheels.

But were these causes remedied, we should still have a source of discomfort to passengers in the inefficient adaptation of the wheels to their purpose. They are fixed solidly to the axles, which, turning with them, must necessarily be always at right angles to the length of the carriage. It is, in fact, returning to the old Roman wagons. These compelled the making of those long straight roads, of which numerous traces now exist, because they could not turn corners or go round curves, by reason of their fixed axles. The railway carriage is in much the same condition. In its constant passage over curves, it occasionally gets over the difficulty by going over an embankment, but usually compensates for deficient mechanical arrangement by grinding the flange of the wheel against the rail; and thus arises another cause of annoyance to the passengers, in that unpleasant jar which such a process produces.

Remedies.

That the wheels themselves, instead of being slices of solid rollers, may be constructed so as to be to some extent elastic is the opinion of many practical men; and there is reason to believe that the destruction to the stock, and discomfort or injury to the passengers, which the above-mentioned deficiencies in construction or adaptation lead to, might be obviated if the skill and experience of those well acquainted with railway matters were directed to the subject; and this suggestion of a conclave of practical men to consider these and kindred matters is one which we believe it would now be most desirable to carry out for the benefit of the companies and of the public.

The pace.

The first necessity, as we have said, is not to obviate the vibration, but to prevent its production. We believe that the high rate of speed now maintained on all railways is unnecessary; whilst the increased motion it produces, and the enormous wear and tear it causes, are absolutely injurious. Its diminution would increase the safety of travellers, and was one of the many important suggestions made in the Report of the Parliamentary Committee, not one of which has yet been carried into effect. These included also the following recommendation:—"Your Committee is of opinion that the perfect regularity in the time of the departure from and arrival at each station by the trains, which would appear to be a material element of safety in railway travelling, may be attained by legislative interference, to the extent of enacting that, except under exceptional circumstances, the public should have some means of obtaining prompt and cheap redress in the recovery of penalties in every case of want of punctuality in the departure and arrival of trains at every station." To business men travelling by rail such a regularity (or indeed any other) for insuring punctuality would be a valuable boon. Absolute punctuality in arrival of trains is the exception and not the rule; and the anxiety and urgent hurry on arrival thus entailed on men of business especially tend to increase any ill effects that the long and rough railway journey may have produced.

Punctuality of trains.

*** Owing to the great pressure on our space, the conclusion of this Report is deferred until next week.

Correspondence.

"Audi alteram partem."

TREATMENT OF CANCER BY SULPHATE OF ZINC.

To the Editor of THE LANCET.

SIR,—Some twelve months ago you kindly inserted in your journal a communication from me, that described the beneficial effects which followed the use of the sulphate of zinc in a case of cancer. The following relates to its progress:—

When I wrote to you last nearly two-thirds of the scirrhous mass had been absorbed; the space between the nipple and the centre of the sternum was in a perfectly healthy condition; that between the nipple and the axilla was occupied by a jagged mass larger than a hen's egg; the glands in the axilla were enlarged and tender, and the integuments thickened; the red spot near the nipple was quiescent, it had neither bled nor discharged the watery fluid for some time; a deep fissure about two inches long had engulfed the nipple. About the end of May the absorbing process had gone on with a rapidity that surprised me, and the lady suffered no inconvenience worth mentioning; the pain was described as a disagreeable sense of heat about the red spot, and tenderness on pressure, but none of the characteristic pains of this terrible disease. About the end of July there was not a vestige of the tumour remaining, excepting a small portion immediately under the red spot, which was unattached to the pectoral muscle; the glands in the axilla were not to be felt, bore any reasonable amount of pressure, and the integuments had recovered a healthy condition. Early in August, local appearances continued extremely favourable, but the whole breast was most sensitive to the slightest pressure. She was very weak; her nights were almost sleepless; no appetite; palpitations of the heart; and an indescribable feeling of weariness and want in the gastric nerves, nearly amounting to absolute pain; yet pressure occasioned no inconvenience. Her countenance was truly cachectic. I could not account for this change, unless produced by the extreme heat of the weather, for the skin acted profusely. I ordered the breast to be well fomented night and morning with a decoction of hemlock and Peruvian bark, quite tepid; and during the day, jeweller's cotton, well sprinkled with powdered camphor, to be constantly worn, covering it with a piece of oil-silk. I gave her sulphuric acid, with extract and decoction of bark, valerian, &c., and directed the abdomen to be covered with flannel, well saturated with spirits of camphor in these proportions: camphor, half an ounce; spirits of wine, one ounce. I should observe that the use of the zinc was never omitted, and has been regularly continued to this day. The stomach of my patient never has borne more than four grains to the dose; beyond that strength it uniformly produced nausea and general distress. I then returned to the original dose (two grains), and gradually increased it. This local plan was persevered in to the end of September. In about a week from its commencement the integuments had lost their diseased sensibility, and in three weeks her health seemed greatly restored. She had suffered very little pain, and that of an ordinary character. In the beginning of October her general health was good. From the red spot the thin watery discharge continued, which turned perfectly green on being tested with infusion of roses. The surface of this spot is uneven, with elevated edges; the discharge inodorous. The only remaining part of the tumour is under this, scarcely the size of a small walnut, and remains unattached. She was then taking iodide of potassium, hemlock, bark, &c. Such medicines have been, perhaps empirically, varied from time to time, but always appeared to have been useful; the gallic acid was particularly so. Soon after this the whole gland became uneasy; it looked puffy and pallid, but no induration. I kept constantly applied to it a tepid decoction of galls. In the course of a week it effected every desirable change. My patient through life has been troubled with bilious disorder, three attacks of which have occurred within the last twelvemonth. They yielded to the usual remedies. Towards the end of August I was induced to give one-twelfth part of a grain of calomel with a grain of rhubarb every night, and a gentle laxative once or twice a week in the morning. This, together with all other appliances, local and general, have been continued to this time.

The present condition of this patient is most satisfactory. I can with truth say that her general health is very good, and she is quite free from suffering; the local condition, too, is

much amended, the disease being confined to this red spot, which has ceased discharging. The fissure which engulfed the nipple is obliterated, and the nipple stands much more prominent.

In conclusion, permit me to remark that in this case the sulphate of zinc has exerted a very beneficial influence over the cancerous diathesis. Whether it would be found generally to possess this power I cannot say; I should, however, question it, from the knowledge that steel medicines will work wondrous changes in some, while in others, under apparently the same circumstances, they will produce the greatest discomfort. Be this as it may, the subject is a very important one, and well worthy of serious reflection.

I am, Sir, your obedient servant,

HENRY GEORGE, M.R.C.S.

Hornton Villas, Kensington, Feb. 1862.

THE SURGEONS AT NEW HARTLEY.

To the Editor of THE LANCET.

SIR,—After the magnanimous offer of Dr. Kennion, of Harrogate, to commence a subscription with the view of presenting the surgeons who attended while the operations were being carried on at New Hartley with something to mark the approbation and esteem of the medical profession, I think the subject ought to be kept in agitation in your columns. All who witnessed, as I did, the earnest, unflagging attention of Messrs. Davison and M'Alister, and other humane surgeons who stood on the pit-heap—some of them ready and willing to go down into the workings—during those terrible eight days of agonizing suspense, will heartily approve of, and give their support to, the movement.

As the names of *all* the medical gentlemen have not hitherto come before the public, I take the liberty of giving you a list of those who attended from first to last:—Messrs. A. Davison, Seaton Delaval; J. M'Alister, Dudley Colliery; E. Ward, Blyth; T. Nichol, Bebside; J. Lambert, Seaton Delaval; —Waddle, Seaton Delaval; H. D. Ward, jun., Blyth; —Ambrose, Yacht, *Endeavour*. Nearly the whole of them expressed their willingness to descend the shaft if their services were required.

A gold medal, with a suitable inscription, would be an appropriate testimonial; and trusting you will continue to give the subject your powerful advocacy,

I am, Sir, yours truly,

West Cramlington, Feb. 1862. OBSERVER.

THE MEDICAL PROFESSION AND LIFE ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—As there are still a few, though happily very few, life insurance offices which refuse to pay the medical referee, the battle is not yet quite won. The following fact, for the correctness of which I can vouch, may assist the directors to overcome their conscientious scruples in this matter:—

A life office which for years most obstinately refused to do justice to our profession has for the last five years, seeing the error of its ways, paid to its medical referees £400 in fees, and has thereby saved £6000 to the society, through the faithful report of those medical referees on pathological facts which the medical examiners for the office did not and could not discover. I am, Sir, yours obediently,

St. Helen's-place, Feb. 1862. SAMUEL SOLLY, F.R.S.

OPERATION FOR NÆVUS.

To the Editor of THE LANCET.

SIR,—A few weeks since, I read in THE LANCET an interesting operation for the radical cure of nævus, as performed by Mr. Gay, of the Great Northern Hospital. Since then I have had a similar case come under my notice, and I determined to follow his plan for its removal. Similar to Mr. Gay's case, it was situate in the forehead of a child aged two years and a half, and was about the size of a pea. Two needles were passed through the base of the nævus, and an elliptical incision made in the direction of the corrugator muscle; the tumour was then removed, and the edges quickly drawn together by means of ligatures. The hæmorrhage was very profuse for the moment, but, as Mr. Gay remarks, it is soon arrested by means of the junction of the edges of the wound.

I much prefer making the incision in a transverse rather than in a vertical direction, in consequence of having the assistance of the corrugator palpebrarum muscle. If, however, the long axis of the nævus should extend vertically, the incision would of course follow the same direction. One objection to the needles is, in my opinion, their tendency to ulcerate through the skin from the tight interlacing of the silk. I should imagine that the divided edges of the wound would be as effectually brought together by means of small steel or silver bars, placed horizontally along the margin of each lip of the wound, and firmly drawn together by means of a double silk suture.

In this case I have every reason to be well satisfied with the operation, and I do not think there will be the slightest scar. I am, Sir, your obedient servant,

ROBERT TASSELL, M.R.C.S.E.

St. Margaret's, Canterbury. Feb. 1862.

INFLUENCE OF RAILWAY TRAVELLING ON PUBLIC HEALTH.

MORBID EFFECTS OF RAILWAY TRAVELLING.

To the Editor of THE LANCET.

SIR,—As regards the effects of railway travelling upon hæmorrhoids, I have observed that those already affected with them have had them greatly aggravated; and in many instances which I have seen they have been produced by a series of prolonged railway journeys. The presence of an over-distended bladder and loaded rectum also tend to produce this condition of the hæmorrhoidal veins. They act locally by interfering with and impeding the circulation; encroach and press upon the venous channels, and this mechanical obstruction tends to produce or aggravate hæmorrhoids. Again, the resistant efforts (when the calls for defecation and micturition are urgent) leading to enforced and spasmodic contraction of the sphincters will materially aggravate already existing piles, because the sphincter ani will play the part of a ligature around any piles already extruded. I have seen adults whose bladders have been so distended that paralysis has been established to some extent, so that when the chance for micturition has arrived (by leaving the carriage) they have been unable to empty the bladder on the first trial, and the muscles have required an indulgence of a minute, or perhaps more, before their contractile efforts could be brought to bear. I have traced incontinence of urine to an over distended bladder, in children; and convulsions, also in my young patients, from a loaded state of the bowels.

After the immediate effects of prolonged railway travelling upon nervous persons have passed away, I have noticed that a second series of symptoms occasionally manifest themselves. For days afterwards, tinnitus aurium, headache, and vertigo may persist, whilst awake; and the moment such subjects lose their consciousness in sleep, they go over all the incidents of their journey again. They feel the oscillatory undulating motion; they shudder as they fly past a bridge, meet a train, or enter a cutting; they shiver through a tunnel; and awake (with a start, scream, and palpitations) at the fancied shriek of the whistle. Persons travelling at night through the iron and coal countries, where all around lies in the lurid glare of kilns, forges, and furnaces, and the figures of the workmen are seen distorted and moving to and fro (presenting a picture of what one may suppose aptly to resemble the ancient domains of Pluto and the infernal regions),—persons travelling in such districts may undergo a shock to the nervous system which it will require weeks to remedy. From my observations, made when superintendent to a large lunatic asylum, I consider that such shocks are very detrimental to a constitutionally weak person, and that their frequent occurrence in a subject of low mental power would materially assist in aggravating any tendency to mental disease.

I am, Sir, your obedient servant,

Bromyard, Feb. 1862. RICHARD MARLEY, M.R.C.S.

EFFECTS UPON ENGINE-DRIVERS AND GUARDS.

To the Editor of THE LANCET.

SIR,—In connexion with the subject of the Influence of Railway Travelling upon Health, there are a few facts which came under my own observation during the fourteen years I was surgeon to the railway works at Wolverton.

With regard to engine drivers and firemen, they are subject to *severe* attacks of rheumatism,—frequently acute inflammatory rheumatism, which is very like inflammatory gout. Should any of them have disease of the lungs, it is sure to become de-

veloped very soon; consequently many have died of consumption. Pneumonia and bronchitis are frequently contracted, and the expectoration is generally melanosed and very bad, from the particles of coke dust they constantly inhale. I used to recommend strongly the use of flannel clothing next the skin, and in many instances the men have thanked me for my suggestion. From the alternations of heat and cold to which they are subject, I consider them much more liable than any other class of men to contract the diseases before mentioned. If they drink much beer and spirits they cannot last long. They are generally too many hours on their engines at one time; and, altogether, I think their lives are in most cases very much shortened.

With respect to guards on the line, they are, as a body, well-conducted, healthy men, and are not so exposed to the weather as engine drivers and firemen; but of course there are exceptions in both cases. There are a few old drivers I know who have always been steady men, and who, having got used to the changes, seem never to have anything the matter with them.

I am, Sir, yours truly,

Winslow, Bucks, Jan. 1862. WILLIAM A. ROGERS, M.R.C.S.

ABORTION RESULTING FROM RAILWAY TRAVELLING.

To the Editor of THE LANCET.

SIR,—The following case is, I think, interesting as showing the susceptibility of some constitutions more than others to the injurious influences of railway travelling:—

A lady of rank, twenty-three years of age, of a highly nervous and excitable temperament, travelled to London by rail, a distance of some two hundred miles. She felt labour pains coming on about an hour after she had started; they increased in severity from the moment of their commencement, and within one hour after her arrival in town, an ovum of between three and four months was expelled. She made a good recovery, and as this accident lost her a son and heir, she naturally enough resolved not to attempt long railway journeys for the future when *enceinte*.

In the course of two years after this mishap, she again became pregnant, and studiously avoided all railway travelling occupying more than one hour; but when within a month or six weeks of her full time, she was obliged to leave London for the country, a distance a little over one hundred miles, by rail. She had not travelled half an hour before labour began, and with such power and rapidity that the liquor amnii escaped; and it seemed inevitable that she must be delivered in the carriage, which event, however, fortunately did not occur, but took place immediately on her reaching her destination.

I remain, Sir, your obedient servant,

GUSTAVUS MURRAY, M.D.

Green-street, Grosvenor-square, Feb. 1862.

THE PRODUCTION OF NAUSEA AND SICKNESS.

To the Editor of THE LANCET.

SIR,—My experience as to the influence of railway travelling on health does not afford many decisive examples. I have, however, known ladies frequently to complain of the motion producing precisely the same nausea and eventual sickness which so many experience on a sea voyage. I have now a lady under my care who suffers dreadfully whenever she travels by rail to Brighton. I read the commissioners' report weekly, and that with much satisfaction.

I remain, Sir, yours respectfully,

West Brompton, Feb. 1862. FRANCIS GODRICH, M.R.C.S.

EFFECTS OF RAILWAY TRAVELLING UPON THE URINARY ORGANS.

To the Editor of THE LANCET.

SIR,—I beg to forward you the following two cases which came under my notice, showing the injurious effects of railway travelling upon the urinary organs:—

An elderly gentleman, who resides in the Isle of Wight, and who has been the subject of stricture of the urethra for several years, and has latterly been suffering in addition from subacute inflammation of the bladder and prostate gland, came to me about nine months since, and placed himself under treatment. He came to town at short intervals, and after each journey complained of great annoyance from an aggravation of his more urgent symptoms. Upon close investigation it could be clearly traced to the modes of conveyance: he was obliged to have three—namely, a carriage to the pier, the steam-vessel to cross, and the rail to town. His several miles' drive to the pier and crossing produced no inconvenience; but he had not performed half his journey to town before he was overtaken with an almost insurmountable desire to pass urine, with all the accompanying pains and penalties, which increased as he progressed. He continued to suffer more or less each visit, and only lost the annoyance with the cure of his disease.

The other case was that of a gentleman farmer from the further end of Berkshire. He has been suffering from stricture for the last ten years, and has, to use his own words, "travelled almost all over the world." He very seldom rides on horseback, but walks many miles daily, being fond of field sports, and frequently uses carriage exercise, from neither of which does he experience any sort of annoyance; but his journey to town, made by express train, very soon painfully reminds him of his mode of transit by producing very great irritation in the urinary organs; indeed, he occasionally suffers so much, that he is obliged to have recourse to the warm bath before he can submit to the necessary treatment.

I am, Sir, your obedient servant,

St. Thomas's-street, Feb. 1862. SAM. J. BAYFIELD, M.R.C.S.

SYMPTOMS OF SPINAL MENINGITIS.

To the Editor of THE LANCET.

SIR,—I think the following will be deemed of sufficient interest to the profession for insertion in your journal, showing, as it does, the serious results which sometimes follow a most trivial injury, and the difficulty of giving a proper prognosis immediately after an accident:—

George B——, aged four years, a fine, stout, healthy boy, was returning from the chapel attached to the workhouse, on Wednesday, the 12th instant, when a playmate, aged six years, kicked him (as was stated) in the loins. He cried at the time, but afterwards walked into the school-room. For the next few days he appeared rather feverish, but nothing occurred to induce the nurse to call my attention to the child until the Sunday following. I then found him hot, feverish, and restless, but sensible, moaning slightly, with an indisposition to move his extremities. I ordered him to the infirmary, and prescribed a saline and diaphoretic mixture, together with a purgative of calomel-and-jalap, with a hot bath. In the evening of the same day he was reported a little better, but afterwards passed a restless night; and, on the following morning, I found that the mischief was extending upwards, for the breathing became laboured, with great tenderness over the dorsal region. Leeches were then applied to the spine, the powder and bath repeated, his diet consisting of beef tea, milk, &c.; but the extension of the paralysis was hourly perceptible. In the afternoon, the arms became powerless, the breathing shorter, and twitching of the lips had commenced. The powder had operated and urine had passed. At seven P.M. convulsions commenced, which continued until five A.M., when death ensued.

On the Friday following an inquest was held. Without having made a post-mortem examination, I gave it as my opinion that death had resulted from injury to the spine. The jury returned a verdict—Homicide by misadventure. Feeling the seriousness of such a charge, I have since made a post-mortem examination, and found no external marks of violence. All the internal organs were healthy; the brain firm, but congested—the congestion greater towards the pons Varolii; and strong evidence of spinal meningitis, continuing downwards to the first lumbar vertebra, below which there was apparently freedom from disease.—I am, Sir, your obedient servant,

EDMUND ROBINSON, M.R.C.S.,

Birmingham Workhouse, Feb. 1862. Resident-Surgeon.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

THE Central Society of the General Medical Association has, through its working Committee, recently made a statement of accounts; the "Compte Rendu" comprises an announcement of the receipts and expenditure for 1861, as well as of the actual financial position. This Society, still in its infancy, will only in the ensuing month of April complete its third year of existence, and not until the expiration of the triennial period do the functions of the relieving Committee come into operation. The capital is a very small one to begin with, only 14,264 f.,

(not £600.) and as the applications for relief, already numerous, cannot fail to multiply, it is much to be desired that the resources of this benevolent fund may increase *pari passu* with the demands upon its good offices. It is difficult to imagine how, with such names as those of MM. Rayer, Andral, Michel Lévy, Blache, and Barthez, upon the Council, and an annual subscription of ten shillings only, any member of the profession should withhold his support from a Society, the very nature of which renders a hearty and universal co-operation an indispensable element of success.

M. Nélaton devoted the whole of an interesting clinical conference last week, at the Hôpital de la Clinique, to the consideration of a variety of tumour hitherto undescribed in surgical treatises, for which he claims a distinct place in the pathological vocabulary. "The fibrous tumour of the iliac fossa," which is the name given to this particular growth by M. Nélaton, has been met with by this surgeon on fifteen or twenty occasions during the course of his practice, and on each occasion possessed of the same peculiar indications of identity which entitle it to a special recognition. (That the diagnosis of such tumours is not, however, very easy, I happen to know; for one of the cases referred to by M. Nélaton, and in which he ultimately operated with success, had already been seen by a friend of mine here, an excellent and talented surgeon, who declined to meddle with a growth presenting, he said, undeniable evidence of cancerous structure.) The particular case which furnished the text of M. Nélaton's lecture was that of a female, aged twenty-six, who was admitted into the Clinique in the last week of January. She stated that four years ago she was delivered of a child, and shortly after the accouchement noticed in the right iliac fossa a small firm tumour as big as a nut. This increased slowly, and gave pain, mostly in the immediate site of the swelling, but occasionally darting down the thigh and leg of the same side. At present the tumour, situate just above the fold of the groin, is oblong and oval in form, with its long diameter parallel to Poupart's ligament. The skin is not adherent to the swelling, and presents no discoloration, and on pressure the growth is found to be firm and resistant, like a uterine polypus. The patient, when questioned as to the amount of pain present, compared her sensations to the pricking of a pin, and stated that she suffered more at night than in the day, and more after exertion than when her day's work had been easy. The summer season, as well as the monthly period, seemed likewise to have considerable influence in the aggravation of her pain. These tumours, of which M. Nélaton has extirpated two, are made up of a fibrous tissue, bearing great resemblance to that met with in the fibrous polypi of the uterus, and are almost constantly attached by firm adhesions to the crest of the ilium, whence possibly they spring. An interesting point in the history of these formations is their exclusive appearance in the female; in none of the instances witnessed by M. Nélaton was the patient a male, and this fact he explains by the occurrence of the periodical congestion in these regions in the woman, and its operation as a predisposing cause. As these tumours increase in size, they encroach upon the neighbourhood of the inguinal canal, and passing into the sub-peritoneal cellular tissue, between the peritoneum and the fascia iliaca, push forward the inguinal canal. Their progress is slow, and though in some cases they may attain a size equal to that of the fœtal head in the space of ten years, this is not the rule. It is not easy, according to M. Nélaton, to confound the fibrous tumour of the iliac fossa with any other surgical malady in the same region. Between it and aneurism, abscess, hernia, and stercoral tumour, there cannot possibly be confusion for a moment. In the case of enchondroma, however, the differential diagnosis may be, in a slight degree, more puzzling; but the difficulty is dissipated by bearing in mind that the surface of the latter is knobbed and uneven, as well as hard and cartilaginous, whereas in the former it is firm, but not hard, and perfectly smooth. In the distinction between them and syphilitic tumours, the best diagnostic sign is the condition of the skin, which in the last is invariably found to be altered in colour, less movable than in the normal state, and slightly adherent. With regard to the indication or contra-indication of the operation, when once the nature of the tumour has been made out, M. Nélaton observed, that if the tumour were not very voluminous nor very troublesome, surgical interference was uncalled for; but if its growth were rapid, and its presence very irksome to the patient, then extirpation might be considered advisable. Another method for treating these tumours has been proposed and actually resorted to, but hitherto without much success. The attachment to the crest of the ilium being a species of pedicle, and containing the chief source of vascular supply to the morbid growth, this it has been deemed expedient to divide subcutaneously, with a view to the starvation and reabsorption of the tumour. This operation has been attempted and has failed, for it is more than probable that, although the pedicle is mainly concerned in the nutrition of the swelling, the atmosphere of cellular tissue in which the tumour is imbedded also contributes to its support. In operating, you must not forget, added M. Nélaton, that the tumour lies *upon* the peritoneum in one part, and that this membrane has to be detached from the diseased mass by means of the bistoury. This practitioner, during the course of one of his operations, actually wounded the serous lining of the abdomen; but happily a fold of omentum adapted itself almost immediately to the wounded surfaces, and averted the consequences which might have rendered the accident fatal.

M. Personne, chief apothecary of the Pitié, has just written a little work detailing the results of experiments undertaken with the view of testing the relative value of iodized oil and cod-liver oil in the treatment of scrofulous and other cachectic maladies. The facts are striking, and well supported by proper names of most respectable authority. The cod henceforward will have little else to do than hide his diminished liver.

Last Tuesday's *séance* at the Academy did not present any features of great interest. M. Larrey read the second part of his speech on the question of Army Medical Organization, dwelling chiefly upon the details of service in the field as carried out in the recent campaigns in the Crimea and in Lombardy, and deducing therefrom certain general hygienic conclusions of considerable practical value, but of no very extreme novelty.—M. Gibert presented an instrument devised by M. Baumscheidt of Bonn, destined to produce derivation to the skin in neuralgic and rheumatic affections. This contrivance, termed the "revulsor"—not unlike a very minute cupping scarificator, with needles in place of lancets,—is capable of inflicting at each stroke no less than forty minute wounds or pricks upon the cutaneous surface. The part thus punctured is then dressed, cured, or pickled, with an irritating fluid, of which black pepper and mustard are the active agents; and a full crop of vesicular erythema is rapidly produced. The *alleged* advantages of this method are—instantaneity of action, absence of pain and subsequent cicatrices, and facility of application. I confess that I should feel more comfortable regarding the painlessness of the process, had Dr. Baumscheidt and M. Gibert guaranteed this special immunity by personal experiment.

M. Gustave Heuzé has lately published, under the title of "Le Vin, la Vigne, et l'Alcool," some remarks illustrative of the effects of the oïdium upon the yield of the vineyard, and has at the same time given a description of an improved method of vine-culture which is gradually being adopted throughout France. Both subjects are of particular interest at the present moment, in consequence of the impulse communicated to the wine-trade by the late treaty of commerce between France and England. The grape-disease has, ever since its first appearance in France in the year 1845, annually recurred; and, excepting in those localities in which the growers have anticipated the return of the blight by a timely and copious application of sulphur, the ravages of the disease have persisted. The vine-proprietor, although a great loser at the early period of the oïdium epidemic, is now indemnified for the scarcity of the finer qualities of wine by the increased value of the inferior produce, certain descriptions having within the last ten years quintupled in value. Another effect of the disease has been a complete revision of the old system of viticulture, the plant being now pruned late, so as to be less liable to injury from the frosts of April and May; and each year the two-year-old shoot which has just borne fruit is lopped off, and replaced by a one-year-old shoot, trained, as in the Medoc district, horizontally. Another effect of the increase of value in the inferior classes of wine is that they are no longer manufactured into brandy, but are mixed and fabricated for foreign exportation; while their place is taken by the beet-root, to the conversion of which vegetable into alcohol an enormous impulse has thus been given by the new treaty.

Paris, February 25th, 1862.

HOSPITAL FOR SICK CHILDREN.—The tenth annual meeting of this charity was held in the board-room of the institution. The Hon. Secretary read the general report, and expressed the thanks of the Committee for successful progress. The number of out-patients for the past year had been 11,068, and in-patients 576. The report eulogized the medical staff, and lamented the removal of Mr. Athol Johnson and the death of Dr. M. Babington. The proceedings terminated by the re-election of the officers for the ensuing year, votes of thanks to the medical staff, and also to the chairman of the meeting.

Parliamentary Intelligence.

HOUSE OF COMMONS.

SATURDAY, FEB. 22.

SANITARY CONDITION OF IRELAND.

In the course of some observations in reply to Mr. MAGUIRE, Sir R. PEEL said that the sanitary condition of the people in the four provinces never was better, or the public health generally more satisfactory. There was very little fever in some districts, and none in others.

MONDAY, FEB. 24.

HEALTH OF THE NAVY.

Lord CLARENCE PAGET, in his speech on the Navy Estimates, said, the first and most important question to the seaman is his health. The death rates for the fleet are in general satisfactory; but in some exceptional cases they are not, ranging, in fact, as high as 60 per 1000 per annum. On home stations the rate is 10, and the average on the whole is 16. We have inquired whether some improvement might not be made in the food of the seamen, and also in the ventilation of the berths. We have had a committee sitting some time, and the result is that the Admiralty have resolved to make every possible effort to improve the ventilation of the ships. Everybody who has been on board ship in the lower deck will know that the atmosphere is sufficiently bad to provoke almost any kind of disease, especially phthisis and fevers, as has been shown by the returns from the Mediterranean fleet. We propose, therefore, in the large ships of the line, to reduce the complement of men from 880 to 800; in large frigates from 570 to 510, and in the small frigates from 350 to 310. I advert to this merely to say that the principal reason for reducing the complement of seamen is that the ventilation may be improved. With regard to food, the House last year agreed to allow an establishment at Deptford for the curing of salt beef. This has been of the greatest comfort and advantage to the seamen. It has cost money no doubt; but, depend upon it, it is money well spent, as the men and officers now get good corned beef instead of the "old mahogany" of our younger days.

SICKNESS OF THE CADETS.

In reply to Sir J. ELPHINSTONE, Lord PAGET said that the reports which had reached the hon. member, with respect to the health of the naval cadets on board the *Britannia* since the vessel had left Portsmouth, were not quite correct. Only fourteen cadets had been on the sick list, and that was not an extraordinary number considering the season of the year.

MEDICAL TRIALS.

COURT OF EXCHEQUER.

BRITTEN *v.* DOWLING.

THE plaintiff sued the defendant, a surgeon, residing at Greenwich, to recover damages for having acted with negligence in his professional capacity. It appeared that in the month of April, 1860, the plaintiff while stepping out of a train injured his legs, but took no particular notice of it. Some short time afterwards, he again twisted his foot in stepping on a piece of wood. In the beginning of July his leg became very much swollen, and he called in the defendant, whose first opinion was that it was a case of rheumatic gout. The defendant ordered mustard poultices, &c. The plaintiff, not getting better, determined upon having further assistance, and Mr. Poland, surgeon of Guy's Hospital, went to see him. He performed an incision; and discovered that there was a deeply-seated abscess. After some time plaintiff called in a Mr. Brown, who opened the sinuses to cut out the bone. He performed several operations, and the plaintiff is now quite recovered. Mr. Poland, Mr. Cock, and Mr. South, surgeons at Guy's and St. Thomas's Hospitals, all gave their strongest opinions that the treatment of Mr. Brown was not the correct treatment, and that the diseased bone ought to have been left till it got loose, and then removed. They also said that in the first stage of the case it might very easily have been mistaken for one of rheumatic gout, and gave it as their opinion that the defendant had treated the plaintiff in a proper manner. The jury found a verdict for the defendant.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations, received their diplomas in Dental Surgery, at a meeting of the Board on the 26th ult.:—

Croall, William, Davies-street, Berkeley-square.
Gibbons, Silis Clifford, New Burlington-street.
Gregson, George, Harley-street, Cavendish-square.
Simms, John Blencowe, Queen Anne-street, Cavendish-square.
Steele, Joseph, Plymouth, Devon.
Tibbits, William, Uttoxeter, Staffordshire.
Watson, Samuel Key, St. Heliers, Jersey.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on the 20th ult.:—

Hunter, Richard Henry, New Shoreham, Sussex.
Smeddle, Robert, Tees Bank House, Darlington.

The following gentlemen also on the same day passed their first examination:—

Nash, Walter Llewellyn, St. Bartholomew's Hospital.
Wagborn, Henry, Soho-square.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.—The following gentlemen received certificates of having passed successful examinations in Arts on the 1st ult.:—

Bird, Edward R., Tarporley, near Chester.
Daniels, Edwin, Stone, Staffordshire.
Davies, John, Wrexham, North Wales.
Davies, William, Wrexham, North Wales.
Davies, P. Lloyd, Abergele, North Wales.
Huthwaite, Charles, Nottinghamshire.
Jackson, John, Wigan.
Jones, Robert, Llanrwst.
Jones, J. T., Tremadoc, Carnarvon.
Jones, William, Pwllheli, Carnarvon.
Redford, George, Fulham, Middlesex.

SIR HENRY MARSH.—Mr. Foley is engaged in the execution of a statue of this distinguished physician. It is destined to be erected in Dublin.

ROYAL MEDICAL BENEVOLENT COLLEGE.—The tenth annual festival of this institution will take place at Willis's Rooms on the 18th of June next. The Right Hon. the Earl of Powis will occupy the chair.

AN HOSPITAL FOR STUDENTS.—An establishment of this kind has lately been founded at Vienna; and a ball in aid of its funds will shortly be given under very distinguished patronage.

THE Peninsular and Oriental Steam Navigation Company have received an order from the authorities of the Post Office not to appoint surgeons to their ships in future under twenty-three years of age.

IS IT DREI?—The account of this fabulous poison is clearly drawn from the realms of imagination. It is difficult to suppose that the author of a recent letter had any other object than that of perpetrating a startling hoax.

LONGEVITY.—A woman, named Ann Dunning, died recently at Taunton, at the age of 105 years. She had lived at Honiton till very lately, and her activity was most remarkable. She walked to the funeral of a lady two miles distant in the country about a year since, and home again, alone.

LIABILITY OF MEDICAL OFFICERS OF DISPENSARIES.—A case was tried at Guildhall last week in which two of the medical officers of the late Blenheim street Dispensary were sued for £460 for articles supplied to the institution. The medical officers had acted as the managing committee, and the verdict was adverse to them. We shall refer again to this case.

DEATH OF M. BRETONNEAU.—This distinguished physician has just died at an advanced age, at Passy, near Paris, where he occupied a noble villa. M. Bretonneau's name is connected with some of the most valuable discoveries in medicine, and had risen to great eminence by his teachings and original turn of mind. The two leading men of the medicine and surgery of Paris respectively, M. Trousseau and M. Velpeau, were his pupils.

CHESHIRE LUNATIC ASYLUM.—A very clever and amusing entertainment was given to the inmates of this institution by their kind and indefatigable superintendent, Dr. Brushfield. The various entertainments that have been got up have been productive of evident good by withdrawing their minds from the delusions affecting them.

SICKNESS AMONGST EMINENT MEDICAL MEN.—Three of the leading medical men of Vienna are at present on the bed of sickness. Professor Dummreicher is suffering from pericarditis; M. Sigmund is just recovering from pneumonia; and Professor Rokitansky has been obliged to take to his bed owing to the serious turn which a chronic affection, from which he has been for some time suffering, has lately taken.

HUNTERIAN SOCIETY.—At the annual meeting, held on the 12th ult., the following officers were elected:—*President:* Mr. Critchett.—*Vice-Presidents:* Mr. John Adams, Mr. Alfred Smee, Dr. Peacock, and Dr. P. L. Burchell.—*Treasurer:* Dr. W. Cooke.—*Librarian:* Dr. Stephen H. Ward.—*Secretaries:* Dr. S. W. Devenish and Dr. H. I. Fotherby.—*Council:* Drs. Robert Fowler, C. J. Miller, W. Sedgewick Saunders, and R. Barnes; Messrs. H. Blenkarne, J. Hutchinson, T. Brown, W. Allingham, J. Jackson, Esquire Dukes, F. M. Corner, and A. E. Durham.—Dr. Barnes has been appointed to deliver the Oration of 1863.—On the same evening the Oration was delivered by Dr. Peacock. It was resolved to abolish the admission fee. The effect of this alteration is to enable new members to enter on payment of the annual subscription of one guinea. The Society possesses a valuable library, and is the only Society accessible to practitioners east of Temple-bar.

THE MEDICAL ACT: WRIGHT v. GREENWOOD.—This case was first tried in the Halifax County Court. The judge decided that the plaintiff was not entitled to recover for medical charges because he could not prove that he was registered, although the services claimed for were rendered before the passing of the Act. Tried again upon appeal before Lord Chief Justice Cockburn and Justice Blackburn, it was decided that legislation was not retrospective; the Medical Act did not bar claims existing prior to passing of the Act. Consequently the following is a concise definition of the law concerning recovery for medical services:—"Before recovering for work done, a medical practitioner is bound to prove affirmatively that he is a registered practitioner, but not so if he sues for work done before 1859.

ROYAL LONDON OPHTHALMIC HOSPITAL.—The annual meeting of the Governors of this Hospital was held at the board-room, Moorfields. Mr. Mogford read the report, which stated that the financial condition of the hospital was favourable. The donations and subscriptions, including two bequests, had exceeded those of 1860 by £600, and had left a balance of £7 13*s.* 11*d.* The house-surgeon's report exhibited a constant increase in the number of patients, and this year they amounted to 15,951. The report and statement of accounts were received and adopted unanimously. Votes of thanks were given to the officers of the institution, and the proceedings terminated by the customary compliment to the chairman.

CONDITION OF DWELLINGS AT BATH, AND SANITARY IMPROVEMENT.—At a public meeting at the Guildhall, Bath, resolutions were passed to adopt measures for promoting the sanitary improvement of the city; and also to the effect that, as a large portion of the disease and premature mortality in the country results from ignorance of the laws of health, efforts should be made to communicate information on this subject especially to the working classes and the poor.

PRIZE QUESTIONS OF THE ACADEMY OF SCIENCES, PARIS.—The following are amongst some of the principal prize questions proposed by the French Académie des Sciences at the great public meeting on the 23rd Dec. last:—Physical Sciences: The best Essay on the Nervous System in Fishes, with their Comparative Anatomy, 3000*f.*; The Examination and Nature of Vegetable Hybrids, their Fecundity, and the possible Perpetuity or Non-perpetuity of their Characteristics, 3000*f.*; The Changes during Germination in the Constitution of Tissues, and the Examination of the Matter of these Tissues, 3000*f.*; The Development and Perpetuation of Hybrid Animals by Artificial Fecundation, 3000*f.* Medical Sciences: The Great Bréant Prize of 100,000*f.* for the Discovery of a Specific for Cholera; 4000*f.* for the Discovery of any Atmospheric Agent Causing or Propagating Epidemics; The History and Treatment of Pellagra, 5000*f.*; The Best Mode of Applying Electricity to Therapeutics, 5000*f.* Surgical Science: On the Preservation of Members by Preserving the Periosteum, 20,000*f.* (10,000*f.* of this Prize are contributed by the Emperor). Natural History: The Examination of the Question of Spontaneous Generation, with the view of throwing a new light on the subject, 2500*f.*; How far Vertebrate Animals may be Developed or Changed by Exterior Agents, 2500*f.*; The Distribution of the Vessels of the Latex in the Organs of Plants, and their Connexion with the Lymphatic or Spiral Vessels, 3000*f.*; The Anatomical and Physiological History of Coral, and other Zoophytes of the same Family, 3000*f.*; The Determination by Anatomical Research of the Existence in Plants of Characteristics peculiar to the Great Natural Families, 3000*f.*

MANCHESTER AND SALFORD SANITARY ASSOCIATION.—The annual meeting of this Association was held last week. The report showed that during the last ten years the health of Manchester has greatly improved, the mortality having diminished in the city from 36 per 1000 in 1841 to 1850, to 34 per 1000 in 1850 to 1861; representing a saving of 3500 lives in 10 years.

CHORLTON-ON-MEDLOCK DISPENSARY.—At the annual meeting, which took place last week, the treasurer's balance-sheet showed an expenditure of £372. The subscriptions and donations amounted to £343. By the will of the late Mr. Joseph Holt, of Chester-street Mill, £100 had been added. Thanks were passed to the various medical officers, and they were reappointed, and the meeting terminated with a vote of thanks to the chairman.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, FEBRUARY 22ND.—The deaths in London, which had fallen since the end of January, again exhibited an increase in the week that ended last Saturday, when they were 1415. The average number of deaths for the corresponding weeks in ten years 1852-61, corrected for increase of population, is 1426. Though the rate of mortality that prevailed last week was high, as compared with that which rules in many parts of England, it was not high relatively to that which the London registers have sometimes disclosed at this period of the year. Scarlatina now appears to be on the decline; it was fatal last week in 60 cases, diphtheria in 13. Whooping-cough was fatal in exactly the same amount as scarlatina; but typhus was returned in 72 cases. Bronchitis appears as a cause of death, in the returns of the week, more frequently than any other disease. It was fatal to 163 persons; phthisis to 155; pneumonia to 73.

The births were—Boys, 973; girls, 992. Total, 1965.

Obituary.

JOHN HUTCHINSON, M.D.

THE subject of this sketch was well known to the medical profession from his researches into the physiology of respiration. His account of the action of the intercostal muscles is the theory now generally adopted and taught in the schools; while, by means of the spirometer, of which he was the inventor, the "vital capacity" of the lungs was estimated as it had never been before, and he discovered that capacity to bear a definite relation to the stature in the healthy individual. These and other contributions to science he has embodied in the article "On the Thorax" in the *Encyclopædia of Physiology*. He examined with the spirometer more than three thousand persons of the army, navy, police, firemen, watermen, giants, dwarfs, prizefighters, and men in all positions and grades in life—from peasants to princes of the blood; in addition to his having made many curious and interesting experiments on the same subject upon the bodies of healthy men, suddenly deprived of life. He had great ability as a draughtsman; sculptured admirably in basso relievo; and painted in oils. Having been born in a mining district, his attention was early directed to mechanics and engineering, of which he made many ingenious constructions at an early age. He was in the habit of descending the coal-mines on the Tyne, and had acquired such a store of knowledge in natural philosophy as served him in later years, when examined for long periods in committees before the House of Lords on mining investigations. He gave gratuitous lectures on natural science, both to the metropolitan institutions and afterwards in his native town (the Literary and Philosophical Society of Newcastle-on-Tyne), as well as in other cities. During his residence in the colonies, he continued his geological pursuits, and made, after years of toil, a collection of rocks in the gold regions, which he valued at £200, and which he destined for the British Museum.

Dr. Hutchinson was born at Newcastle-upon-Tyne in 1811, and received his medical education at University College, London. For some years he was an assistant-physician to the Hospital for Consumption, Brompton, and also one of the physicians to the Britannia Life Assurance Company. He died at the Fijee Islands in July last.

MEDICAL VACANCIES.

THE election of a Resident Medical Officer for the Public Dispensary, Carey-street, Lincoln's-inn-fields, vice Mr. A. J. Harrison, resigned, will take place on the 20th instant.

The office of House-Surgeon and Secretary to the Staffordshire General Infirmary has become vacant by the resignation of Dr. Smith.

There is a vacancy for a House-Surgeon, or Assistant Medical Officer, to the Northampton General Lunatic Asylum.

The offices of Medical Officer of Health for the Town of Newcastle, Staffordshire, and Physician to the North Staffordshire Infirmary, Etruria, have become vacant by the death of Dr. George John Wood.

Mr. William Hitchin Pendlebury has intimated his intention of resigning the office of House-Surgeon to the Infirmary and Dispensary, Bolton-le-Moors, Lancashire.

MEDICAL APPOINTMENTS.

DR. F. W. MACKENZIE has been elected Physician to the Queen Charlotte's Lying-in Hospital, in the room of Dr. C. Metcalfe Babington, deceased.

Dr. T. Orme Dudfield has been appointed Surgeon to St. Margaret's and St. John's (Westminster) Workhouse at Kensington, and Medical Officer to the Hamlet of Knightsbridge.

Dr. John Harley, Sub-Dean and Medical Tutor at King's College, London, has been elected Assistant-Physician to the London Fever Hospital.

Mr. Henry Mortlock Fernie has been appointed Resident Medical Officer to the Dover Hospital.

Mr. William Ackman Morton has been appointed Medical Officer for the Horwich District, Bolton Union, Lancashire.

Mr. Alfred Wright has been appointed Assistant House-Surgeon to the Bradford Infirmary and Dispensary, Yorkshire.

Births, Marriages, and Deaths.

BIRTHS.

On the 15th ult., at Artillery-place, Finsbury-square, the wife of Edwin Payne, M.D., of a daughter.

On the 18th ult., at St. Thomas's street, Southwark, the wife of Henry Gervis, M.D., of a daughter.

On the 18th ult., at Molesworth-street, Dublin, the wife of W. M. Burke, L.K.Q.C.P., of a son.

On the 20th ult., at Richmond, Surrey, the wife of Thomas Duncan, M.D., of a daughter.

On the 22nd ult., at Grenville-street, Brunswick-square, the wife of Frederick James Gant, Esq., F.R.C.S., of a son, prematurely.

On the 22nd ult., at Wateringbury, the wife of S. Norton, M.D., of a daughter.

On the 24th ult., at Milton Villa, South Norwood, the wife of J. Carroll Dempster, M.D., Surgeon-Major, of a daughter.

MARRIAGES.

On the 11th ult., Alfred Ives, Esq., late of her Majesty's 9th Lancers, to Emily Rose, daughter of John Spurgin, M.D., of Great Cumberland-street, Hyde-park, and Orplands, Bradwell, Essex.

On the 11th ult., at Kinsale, James Casey Nunan, M.D., eldest son of Dr. Lyons Nunan, of Croom, Co. Limerick, to Kate Joseph M'Carthy, only surviving daughter of the late Charles M'Carthy, Esq., of Kinsale.

On the 13th ult., at Trinity Church, Rathmines, Edward Blennerhasset, Ph.D., son of the late Henry Blennerhasset, M.D., and grandson of the Hon. Elizabeth and Richard Blennerhasset, of Killarney, to Cherry, youngest daughter of the late Samuel Rothwell, Esq., of Newtown, Co. Meath.

On the 13th ult., at St. Bartholomew's Parish Church, Upper Sydenham, John, son of Terence Henry, M.D., late of Athlone, Roscommon, to Agnes, youngest daughter of the late Charles Vyse, Esq.

On the 17th ult., at Edinburgh, William Gellatly, Esq., of George-street, to Elizabeth Wilson, third daughter of William Colledge, M.D., of Springfield.

On the 18th ult., at the Cathedral, Manchester, Stephen Nesfield, Esq., M.R.C.S., of that City, to Mary, youngest daughter of Richard Webster, Esq., of Sedgley-park, Prestwich.

On the 20th ult., at Kew, Dalton Adolphus Haffenden, Esq., M.R.C.S., of Bath-place, Kensington, youngest son of Thomas Haffenden, Esq., M.R.C.S., of Hanwell, Middlesex, to Ada Eleanor, second daughter of Joseph D. Rigby, Esq., of the Priory Lodge, Kew.

At St. Martin-in-the-Fields, Charles R. Godfrey, Esq., R.N., youngest son of the late John Godfrey, Esq., Surgeon, of Cogges hall, to Elizabeth Jane eldest daughter of the Rev. James William Mause, D.D., LL.D., of Upper Clapton.

DEATHS.

On the 13th ult., at Bagot-street, Dublin, Henry C. Beauchamp, M.D., aged 62.

On the 13th ult., Ellen Mary, aged 9 years, and Harriet Eliza, aged 7 years; and on the 21st, Edward Henry, aged 13 months, the children of Edward Cottew, L.R.C.P., of Hornsey-road, Holloway.

On the 16th ult., at Markyate-street, Beds, Richard Stevens, L.R.C.P., aged 66.

On the 19th ult., at the Close, Salisbury, William Andrews, Esq., F.R.C.S., aged 78.

On the 19th ult., Matthew Truman, M.D., of Norland-square, Notting-hill, and Horton Court, Kent, aged 56.

On the 19th ult., at St. Martin's, Stamford, Jemima, the wife of Mark Wilson Jackson, Esq., F.R.C.S., aged 68.

On the 22nd ult., at Strood, Kent, Charlotte, the wife of Robert Brown, M.D., Staff-Surgeon, Medical Superintendent of Quarantine at Standgate Creek, aged 72.

[ADVERTISEMENT.]

NEW EQUITABLE LIFE ASSURANCE COMPANY.

THE Annual General Meeting of this Company was held on Tuesday at the Offices in the Strand.

DR. G. H. BARLOW, in the Chair.

The attendance was very numerous.

JOHN MESSENT, Esq. (the Secretary), read the notice convening the Meeting, and the Directors' Report, which will be found in another part of the journal.

The CHAIRMAN then said—Gentlemen, you have heard our Report, and I feel confident that it must be entirely satisfactory to you. We have had, of course, difficulties to contend with, we have had our share of casualties in the past year; but in spite of this, we have not only increased our income, but, what is of far more importance, our capital. Comparing the business of 1860 and 1861, I find that, in the latter year, we had issued 516 policies, assuring £206,170; against 433 in 1860, for £161,400; an increase, you see, of nearly £50 000 (Cheers). The premiums on new business in 1861 have been £7031, against £5244 in 1860, showing an increase of £1787 10s. 0d.; and what I consider is of still more importance, our total income has been £42,149, of which we have been able to lay by nearly £18,000. Now, gentlemen, this I think is a very satisfactory fact. We have not only done an increasing business, but have turned it to practical account. I think this is really so gratifying that I need not dwell upon it (Cheers). I will now refer to "the proposed amalgamation of this Company with the "Briton Life Association" (Cheers). It may well be said that our present satisfactory position affords an argument rather against than in favour of the amalgamation. If we are doing well, why not let well alone? But you must bear in mind, you can never do well enough in an assurance business. What you want is, to bring your outlay to the lowest possible proportion to your income (Hear, hear). Now, do what you will, you cannot, with a moderate business, arrive at this desirable end, unless you diminish your means of extension, treat your agencies illiberally, and act illiberally to those whom you employ. It is most difficult to reduce the expenditure below certain limits; and the course, therefore, to pursue is, as speedily and safely as possible to increase the income (Hear, hear). Further than this, I would observe that we have succeeded, it is true, to a great extent, a success which is very much due to the great support given us by my brethren of the medical profession; our main business has come from them. Of course, having so many friends amongst medical men implies at once the gratifying fact that a very large number of medical men are assured here. They are careful, temperate men, with very few exceptions; but such men are, from the nature of their calling, exposed, of course, to a great deal of wear and tear. They are, in fact, good average lives. We have to thank the medical profession for bringing us a large amount of business; and, as a rule, they are most careful and conscientious men in their selection of lives (Cheers). Our excellent friend, Dr. Richards, has numerous opportunities of adducing practical instances of the value of Life Assurance, of which he avails himself highly delighted, and would, no doubt, take the advice given him by Dr. Richards, who would say, "You had better look to the future. You had better assure your life for the benefit of your children." When the father has perhaps his seventh or eighth child, he becomes a little anxious, and he will then tell him that he must compel himself to become a saving man, and that there is no better way than by increasing his assurance. That is all a very safe business; but still, there must be in the business brought by medical men a large portion of Invalid Lives, which, although most remunerative, if assessed with discretion, require the most careful consideration on the part of the Board. The business of the "Briton" being composed of a different element will be of vast assistance in equalizing the official experience. This has weighed very much in my mind in encouraging this amalgamation. The public are beginning to look very much to large figures. There has been a sort of rage, I was going to say, for monster offices (Hear, hear). We have had numerous applications for the purchase of the whole of our business, but would not listen to them, because we were established on a truly equitable principle—equity to the assured, equity to the shareholders, equity to all whose advice we ask, especially equity to the medical advisers of the parties applying for assurance (Cheers). And therefore we refused to be absorbed, for we consider it would be rather deserting our colours. But where there is an office carrying out the same principle, where we have been asked not to sell ourselves, not to sell our business, but enter into a partnership, it was a different thing. When this was suggested to us, we could not turn a deaf ear to it, but felt in duty bound to give it our very best consideration. In the first place we had many things in common—we have not to sacrifice anything. Besides carrying out the same principles, our new business income and assets will increase with a very trifling augmentation in the expenses. The "Briton" office did not want to be sold, for they were as unwilling to be absorbed as we are. It was not a shaking, failing office, but possessed a rapidly increasing business. Still feeling the same as ourselves, that they would like to establish a large business—lay a broader basis—and do it at a less expense. The shares are equal, the tables are nearly so, the financial year terminates on the same day, and the Boards meet on the same day and hour. We have the same proportion of profits applied to Members and Shareholders, and each has a small share capital. Then the incomes were similar in amount. Thus, we shall double our income, and we shall nearly double our capital. In addition, the "Briton" introduced the valuable principle of applying the Bonuses so as to make policies payable during the lifetime of the person assured. This is a very important feature, and must be a great means of success as regards our future business, particularly amongst the medical profession, because a medical man instead of going on paying his premiums till he dies, at a given age receives his £100 instead. What an inducement that would be! What an advantage! All this can be done with perfect, in fact, additional security upon the actuarial calculations being duly observed (Hear, hear). Now I must tell you frankly that we have been obliged to maintain a certain amount of reserve respecting the amalgamation. We could not bruit this abroad until it was finally settled, and say to all our assured, we are going to do this. The thing would have been talked about, and our negotiations rendered more difficult. These things should not be made public too soon. Still, as far as we know, the arrangement has met with general approval; and what has been the practical result? Not only this great increase in our income, but what sort of business are we likely to do? We have held two

Board Meetings. What number of proposals have we had? On one, fifty-eight, covering proposals for £13,550. That, you will say, was a good morning's business. On the other, we had seventy-three proposals, covering an amount of £17,050. This is the best proof I can give you of the popularity of this arrangement (Cheers). You see we get a great number of moderate policies, and so make our business the more secure; and we are not so liable to those great risks and caprices of mortality common to Insurance Offices. The greater the number of policies, the wider the basis, the less are we liable to such misfortunes. I do trust that this will meet your approval as conducive not only to your success, but still more to the security of the Office, and, therefore, with your approbation I will conclude by moving "That the "Report of the Directors, with the Statement of Accounts, be and is hereby "approved and adopted." (Applause.)

DR. TYLER SMITH said, my opinion is that our Chairman has taken rather a gloomy view of medical business. It is quite right we should have in the Chair a gentleman of Dr. Barlow's attainments—that we should have a man of caution and reflection in preference to a man who would enter upon any matter rashly, and I join with him in all the arguments he has used in favour of this amalgamation. Still, I should not, as a medical man, like to think that the medical business brought to the office was inferior in any way to other business. On the contrary, my belief is that it is rather superior to the average business. (Hear, hear.) The healthiest lives in the kingdom are those of the day-labourers; but we have to assure the lives of the busy, working, industrious part of the population. With regard to Medical lives themselves, statistics show that they are not inferior to any of the great working professions, except the Church. The Clergy are a little above us in the value of lives, but I believe I may say as a matter of fact, that it has been worked out by Dr. Guy, whose eminence as a statistician none can gainsay, that in longevity we stand next to the Church, and that we are before the Law and some other professions. If you look into our habits you will see the reason why we are, taken collectively, good average lives. We are liable to be called by the public at any hour of the day or night, and are therefore obliged always to keep in a steady orderly working condition. We dare not commit any of the excesses which a man in other professions may find time for. (Hear, hear.) Medical men are peculiarly fitted for the promotion of the business of life assurance. We enter more into social relations than any other body of the community. The law deals with the public generally, the clergyman ministers to large bodies of people, but we are brought into more intimate relations with families and individuals. In this way medical men have greater opportunities than any other body of recommending and of extending life assurance. (Hear, hear.) I believe that they have not done all they might have done from the fact that they were for many years treated unjustly by life offices. A medical man formerly had no interest in recommending a life office, and the whole matter was a trouble and annoyance to him in consequence of the unbecoming and illiberal way in which he was treated by the older offices. This has happily now passed away, chiefly in consequence of the foundation of the New Equitable; and I believe medical men in future will take a more active and increasing interest in promoting the beneficent influence of life assurance. I will not occupy your attention further, but simply second the adoption of the Report; repeating that I cordially agree with the advantage of having a great extension of business, such as that which is secured by the union with the "*Briton*." (Cheers.)

MR. GALSWORTHY said he was perfectly satisfied with the points adverted to in the Report. For his own part, he thought it a matter of wonder how this amalgamation had been brought about, because they all knew doctors were inclined to differ. It was perfectly marvellous to hear how they could be brought to coincide so perfectly. (Cheers and laughter.) They might almost expect to see an amalgamation between two legal offices. He thought there was a very strong tendency on the part of the public to assure in offices doing a large business, and he therefore cordially approved of the amalgamation. It appeared to him that the Company would have an income of about £80,000, and it was not too sanguine to hope that they would be able to make their new business £20,000 a year. He was quite sure that their excellent Secretary would do it, if possible; and he was quite sure that the Company would be in that position, that the public would be disposed to put even more confidence in it than hitherto. (Cheers.)

The resolution was then put, and carried unanimously.

MR. JOHN T. KING, a shareholder, said he thought they ought not to separate without expressing their satisfaction at what the directors had done in this matter; they had revived the patient, and not killed him. (Laughter.) He had never in his life seen an amalgamation settled in so thoroughly satisfactory a manner. He would therefore beg to move—

"That this meeting, having heard the particulars of the amalgamation "between the Briton Life Association and this Company, cordially approves "of the same, and tenders its thanks to the directors for entering into an "arrangement promising such advantage to all parties concerned, and "requests the directors to do all that they may deem necessary to complete "the consolidation of the two companies."

He did not doubt that when they met here next year they would be able to congratulate the shareholders on £20,000 new premiums. (Cheers)

The resolution was seconded by Dr. PALFREY, and carried unanimously.

The retiring directors were then unanimously re-elected.

THE CHAIRMAN.—I have to thank you in the name of my brother directors as well as my own, for your confidence in re-electing us. I do so with peculiar satisfaction on this occasion, because it shows that you approve of our conduct in a matter on which I can assure you we have felt a sense of our responsibility, I may say deeply, in departing from doing well to try to do better; still we considered we should have incurred a far heavier responsibility in neglecting so promising an opportunity for securing the stability and success of the Company. Gentlemen, we thank you most cordially. (Cheers.)

MR. JONES and MR. CHAPMAN having also returned thanks, the retiring auditors were then proposed for re-election by MR. WARD.

MR. ARTHUR SCRATCHLEY, M.A., said he would avail himself of this opportunity of making a few remarks on the amalgamation, in facilitating which he had been somewhat instrumental. It might be satisfactory to them to know that actuaries who had some professional experience considered this amalgamation one of the best that had taken place for years. He thought the New Equitable and the Briton had a special connexion. The Briton was doing a large, and the New Equitable was doing a good business, and together they would obtain a position that would place the stability of the office beyond all doubt. Their income would be increased from £40,000 to £80,000, and they would hold a higher position in the Assurance world. The percentage of the expenditure would be considerably diminished, and that was the main reason why he cordially approved of this matter. Then they should remember that by adding the Briton shareholders to theirs they were increasing their own security; their Share Capital was a small one, not one of which they would speak in a loud voice, but by uniting it would rise from £50,000 to £150,000. He would only further add that the books of the Company were kept in an admirable manner, and inspected in a way to give confidence to the Shareholders. (Cheers.)

The motion was carried unanimously.

The CHAIRMAN said that their Trustee, Dr. Copland, had withdrawn from that office, although he still retained his professional connexion with the Society, and proposed that Dr. Tyler Smith be elected a Trustee in his place.

The resolution was seconded by Mr. JONES, and carried unanimously.

Dr. SHEPHERD proposed a vote of thanks to the Directors. He had never been at a more straightforward meeting.

Dr. ROBERTS seconded the resolution, and said that although it was stated that doctors differed, yet at a social meeting they were generally the most convivial and the most social of all parties. He had no doubt that their brother doctors of the Briton would find their new friends most amiable. (Cheers and laughter.)

The resolution was put and carried by acclamation.

The CHAIRMAN having acknowledged the compliment, Dr. RICHARDS then moved—

"That the thanks of the meeting be given to the Medical Officers both "London and Provincial, and to the Solicitors, for the assistance contributed "by them during the past year."

The motion was seconded by Dr. KNIGHT, and carried unanimously.

The CHAIRMAN said, there is one resolution I should like to propose, and I feel a little diffidence in doing it justice. It is—

"That this meeting cannot allow Mr. Frederick Bigg to retire from his "office without expressing its appreciation of his able, energetic, and courteous "conduct during the long period he has held the position of Actuary and "Secretary to the New Equitable Company, and desires to wish him every "success and happiness in any walk of life upon which he may enter."

Now, at the very commencement of the Company, Mr. Bigg was instrumental in extricating it from very serious difficulties, owing to the irregularities of his predecessors. He not only did that, but infused new life into the Society, and was the chief means of its success. He was one of those who are most impressed with the advantage of the union, and he very nobly placed his retirement in the hands of the Directors; who accepted it, although with great regret, it being necessary to bring about the union. I must say, in conclusion, that I for one should never have consented to part with his services, had we not felt satisfied that we were replacing him by a gentleman more efficient than whom there could not be, and who has earned a very high reputation in the Assurance world as a man of integrity and ability. The devotion of Mr. Bigg to the interest of this Company is a thing which can never be forgotten, and which we ought to remember as long as we are policy-holders.

Dr. PALFREY seconded the resolution, which was put and carried with acclamation.

Mr. E. H. GALSWORTHY proposed that the best thanks of the meeting be given to Mr. Arthur Scratchley and Mr. Messent for the trouble, care, and anxiety, they had taken in the matter of the amalgamation, which was seconded and carried unanimously.

Mr. SCRATCHLEY, in reply, said that he thought that if on any future day they looked back at what they had done, they would not have any cause to regret it. As regards Mr. Messent, no one held a higher position in his profession than that gentleman. His remarkable business skill had been adverted to, but he could add some testimony to his qualities which did not appear on the surface. Mr. Messent was a most accomplished secretary, and a man who had a large amount of legal and practical knowledge, added to the power of obtaining business. (Cheers.)

Mr. MESSENT—Mr. Chairman and Gentlemen, I am sure you will excuse me when I say I really feel unable to address you on the present occasion. The position I occupy at present is so thoroughly peculiar and yet so satisfactory to my own feelings, that it has taken away the little eloquence I possess. This resolution has come upon me quite unexpectedly. Although I, as the secretary of the "Briton," have had the honour of being appointed secretary of the united Companies, it may be satisfactory to the meeting to know that between myself and Mr. Bigg there exists a perfectly good understanding. Both regard each other with feelings of the greatest friendship, which after many years' existence have re-opened with this union. Although Mr. Bigg has given up his official position, he gives me the benefit of his assistance and counsel, and continues a very staunch friend of the Company as well as myself (Cheers). I did wish to express Mr. Bigg's thanks to you, Sir, and the Meeting, for the resolution so kindly proposed and passed to him; but I felt that it would unnecessarily draw attention to myself. He empowered me, however, to say if any resolution should be made in reference to himself, that he continues a firm adherent of the Company and that he hopes to meet you all at the next Annual Meeting as a Share and Policy-holder. I do not think you will be surprised to see that this morning he stayed away. He said, taking all things into consideration, he would rather not be present to-day. I should wish to assure you that the remarks made with reference to Mr. Bigg have but one effect on me, and that is to insure to myself, if I do the duty of my office to your satisfaction, when you have known me as many years as you have known Mr. Bigg, the same amount of indulgence, friendly consideration as you have given to him (Cheers). I cannot speak sufficiently of the welcome I have had at this office from the chairman down to the messenger. Mr. Beaman, the accomplished chief clerk and accountant, has been indefatigable in giving me the assistance and information I should have been very much at loss without. Although I do not take up the gauntlet which Mr. Galsworthy has thrown down of a new income of £20,000 a-year, I promise this much; that what attention and perseverance can do shall be done. It will take us some little time to get all our affairs in order, and to get this amalgamation thoroughly arranged and identified in the public mind. It will take us some little time to do that; but we have willing hearts and strong hands. I believe we shall accomplish it in as short a space of time as possible. The sample of business progress you have had from the Chairman to-day is very satisfactory, for seventy-four proposals for one Board I think is a large number (Hear, hear). The only wonder is where they all came from, and how they all found their way here, and that too, without any undue pressure on our representative staff. I believe that when this union comes to be thoroughly known, we shall do an extensive and first-class business, and if I do not appear before you this time twelve months with a Report saying we have done £20,000, I hope you will attribute it more to circumstances over which we have no control, than any want of attention or exertion on the part of myself or the Directors (Cheers). I thank you for your compliment, but it is fair to tell you that this amalgamation has been arranged thoroughly and entirely, by Mr. Arthur Scratchley, to whose knowledge and tact it is due, although he is good enough to compliment me on the carrying into effect of his ideas. I thank you for your welcome to me this day, and assure you, to promote the prosperity of the Company will be my earnest endeavour in the coming year. (Applause).

A vote of thanks to the Chairman terminated the proceedings.

Medical Diary of the Week.

MONDAY, MARCH 3.....

- ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M.
- ROYAL FREE HOSPITAL.—Operations, 2 P.M.
- METROPOLITAN FREE HOSPITAL. — Operations, 2 P.M.
- ROYAL INSTITUTION. — 3 P.M. General Monthly Meeting.
- ROYAL COLLEGE OF PHYSICIANS OF LONDON.—8½ P.M. Dr. Lionel S. Beale, "On the Anatomy of the Liver, with Observations on Certain Changes occurring in Disease."
- ODONTOLOGICAL SOCIETY OF LONDON.—8 P.M.
- EPIDEMIOLOGICAL SOCIETY. — 8 P.M. Dr. Elliot, of Carlisle, "On Industrial Pathology, or the Special Diseases and Mortality arising from certain Trades and Occupations."
- MEDICAL SOCIETY OF LONDON. — 7 P.M. General Meeting for Election of Officers and Councillors. —8½ P.M. Dr. Richardson, "Further Researches on the Therapeutic Properties of Peroxide of Hydrogen."

TUESDAY, MARCH 4 ...

- GUY'S HOSPITAL.—Operations, 1½ P.M.
- WESTMINSTER HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Mr. John Marshall, "On the Physiology of the Senses."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Gulliver, "On the Blood of the Vertebrata."
- ETHNOLOGICAL SOCIETY.—8 P.M. Mr. G. Windsor Earl, "On the Shell Mounds of the Malay Peninsula." — Dr. Robert Knox, "On the Remains of the Human Cranía and other Bones in the Church at Hythe."—Mr. Edward B. Tylor, "On the Languages of Central America."
- PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

WEDNESDAY, MARCH 5

- MIDDLESEX HOSPITAL.—Operations, 1 P.M.
- ST. MARY'S HOSPITAL.—Operations, 1 P.M.
- UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M.
- ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 2 P.M.
- OBSTETRICAL SOCIETY OF LONDON. — 8 P.M. Dr. Barnes, "Notes on the Broncho-Pneumonia of Lying-in Women." — Mr. Baker Brown, "On Ovariotomy: the Mode of its Performance, and the Results obtained at the London Surgical Home."
- GEOLOGICAL SOCIETY OF LONDON.—8 P.M.

THURSDAY, MARCH 6

- ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
- CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 1 P.M.
- LONDON HOSPITAL.—Operations, 1½ P.M.
- GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.
- LONDON SURGICAL HOME.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Gulliver, "On the Blood of the Vertebrata."
- HARVEIAN SOCIETY. — 8 P.M. Mr. de Méric, "On Gonorrhœal Ovaritis."
- LINNEAN SOCIETY.—8 P.M. Dr. Cobbold, "On the Cones of the Retina, and on the Choroid Gland of the Cod-fish."

FRIDAY, MARCH 7 .....

- WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M.
- ROYAL COLLEGE OF PHYSICIANS. — 4 P.M. Gulstonian Lectures: Dr. Pavy, "Assimilation and the Influence of its Defects on the Urine."
- ROYAL INSTITUTION. — 8 P.M. Prof. Oliver, "On the Distribution of the Northern Plants as influenced by Climatal and Geographical Changes."
- WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. — 8 P.M. Mr. Bernard E. Brodhurst, "On Anchylosis."

SATURDAY, MARCH 8...

- ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
- ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
- KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
- CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Mr. H. F. Chorley, "On National Music."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Gulliver, "On the Blood of the Vertebrata."
- CHRISTIAN MEDICAL ASSOCIATION.—8 P.M. Meeting at Freemasons' Hall.

To Correspondents.

F.R.C.S.—The application of the "linimentum aquæ calcis," for the purpose of preventing pitting in small-pox, has been recommended by Dr. Joseph Bell, of Glasgow. According to his trials of different agents, this is the least disagreeable to the patient.

Medicus, (Coventry.)—A certificate of death from a druggist is *not* received as a medical certificate. On the contrary, the patient is stated to have "died without medical attendance." Qualified practitioners have no just grounds of complaint if, in consequence of the neglect to register, their certificates are similarly treated. They have only themselves to blame if they refuse to comply with the wholesome provisions of an Act of Parliament.

Mr. John Gray.—The information can be obtained by application to the Medical Registrar, 32, Soho-square.

CHARGE FOR VACCINATION.

To the Editor of THE LANCET.

SIR,—A patient of mine lately took exception to a very moderate charge for vaccination, affirming that in the Midland Counties it was the custom to make no charge for it. Is this so? If it be, there can be but one opinion as to the impropriety of such an arrangement, the existence of which, doubtless involuntary on the part of any medical man who recollects what is due to himself and his profession, can only be excused by the want of combined action amongst medical men in respect to their common interests.

How long, Sir, are we to suffer from this want of combined action? I say, we; not the few prosperous men at the head of the profession, but we who constitute its mass. Every other profession combines to protect its interests. Every trade does the same. The doctors alone, who want it more than any, have no mutual understanding as to their consentaneous action. Partial movements, it is true, have sprung up; but we lack any comprehensive plan. There ought to be a universal Association of all the medical men in the kingdom, for the purpose of attending to their common interests, quite apart from the science of the profession. Not that I would advocate the founding of a new Society; nor is it advisable that any scientific Medical Society should take up such matters, which are totally foreign to their objects. Many Medical Societies have been damaged by interfering with things belonging to the ethics or the politics of the profession. Our art and science is one thing, our worldly interests another, and they must be kept distinct. Deprecating, therefore, any addition to the number of existing Associations, and excluding the scientific Medical Societies as having objects in view incompatible with the points sought for, I would ask if there is not some Association ready formed fitted to undertake it? Might not the National Medical Registration Association enlarge its grasp, so as to comprehend *all* matters relating to our worldly welfare and position? This Association has, or might easily have, branches in every town in the kingdom, and by carefully limiting its operations to its own proper business, and defining and conducting this according to the expressed wishes of the profession, might easily command the confidence of the whole body, who would soon find the benefits of its operation.

I for one would gladly subscribe to such an Association, and conform to the principles generally understood and received by its authority; but such authority ought to be derived, not from the plans of a few men, but from the voice of the whole profession. I am, Sir, your obedient servant,

February, 1862. F.R.C.S.

THE address of the National Medical Registration Association is 44, Parliament-street.

Obstetrics.—The negroes of the West Indies are said to place great faith in the leaves of the castor-oil plant as forming a galactagogue, and to frequently use it for this purpose, applied fresh and bruised, to the breasts. Dr. Routh has spoken well of this virtue of the Ricinus communis, and more recently Dr. Gilfillan, of Brooklyn, N.Y.

MEDICAL STUDENTS' DIRECTORY.

To the Editor of THE LANCET.

SIR,—Would not a "Medical Students' Directory" be a useful book? I think you will answer in the affirmative when you have read my letter. It could very easily be compiled. Principals could by reference to it always see at what school any gentleman, with whom they might be corresponding prior to engaging him as assistant, had studied, and what year he entered, also if he had been clinical clerk, dresser, &c. There are some medical students who before they have completed their studies, take situations for a time, and in endeavouring to obtain these situations do not always confine themselves to the truth. I know these are exceptional cases, and, as a body, medical assistants are much too gentlemanly and upright to degrade themselves by endeavouring to deceive; nevertheless, some there are who unfortunately do so degrade themselves. For example, an advertisement appeared in a medical journal a short time since, to the effect that a gentleman who had completed his studies, but without diploma, was desirous of meeting with a situation. Being in want of an assistant at the time, I wrote to the gentleman, and ultimately agreed with him, giving him rather a high salary in consideration of his having *completed* his studies. When, however, he had been with me a few weeks, I by chance heard that he had only commenced his studies in May, 1861, and that he had only studied one summer session at hospital. I, of course, was much annoyed on hearing this fact, and shortly after parted with him.

Now, Sir, I think if a small bound book were to be published, containing the names of the registered medical assistants, it would prevent the occurrence of such like proceedings on the part of the assistant. I am sure the Secretaries at the several examining boards would willingly supply a list of the names annually registered by them. It ought to be published in January of each year, and I will give three examples of what I think would answer the purpose. The first shall be a first-year's student of St. Thomas's Hospital, who has registered at the College of Surgeons and Apothecaries' Hall—"Jones, Edward, St. Thomas's, 1862 (Coll. Surg. and Apoth. Hall)." The second example shall be a third-year's student of Guy's, who has only registered at the College of Surgeons, and who has been dresser—"Smith, John, Guy's, 1860, '61, '62 (Coll. Surg.), dresser in 1861." The third example is that of a second-year's man of King's College, who has registered at both College and Hall, and been clinical clerk—"Robinson, Henry, King's Coll. 1861, '62 (Coll. Surg. and Apoth. Hall), clinical clerk in 1861."

I will now leave the subject to be digested by more competent men than myself. Any student who is a member of any Medical Society attached to his school, or who has read a paper on any subject (medical or surgical) before the members of such Society, by sending notice of the same to the Editor, ought to have it inserted after his name.

Apologizing for the length of this letter, and hoping to see a "Students' Directory" in January, 1863,

I remain, Sir, your obedient servant,

London, February, 1862. L.R.C.P. Edin.

P.S.—Of course the dates refer to the time of registering.

Beta.—M. Fleury, Professor of Clinical Surgery at Clermont, has been lately carefully inquiring into the matter. He denies the truth of the statement of MM. Roux and Bouisson, that tobacco-smoking is the most frequent cause of cancer of the lip. Speaking of the cases of 86 patients, he says that they were all inhabitants of country districts, where the pipe or the cigar is rarely seen. M. Fleury inclines to the opinion that the habit which the class in question have of spending six months every year in their stables, and the foul air to which they are subject during that time, have more to do with the production of the disease than any of the causes hitherto assigned. It may be fairly asked of M. Fleury, however, how he would explain the selection of the lip for the cancerous manifestation in such cases.

MEDICAL LIBRARIES IN HOSPITALS.

To the Editor of THE LANCET.

SIR,—The question of founding a medical library at the Derbyshire Infirmary is being mooted. The idea originated from what I saw on a casual visit to Northampton, where there is a very good medical library at the infirmary, and a grant of £20 per annum is made to it from the funds of the charity. The books are primarily for the use of the honorary and resident medical officers; but other medical men and the hospital pupils have the use of the volumes on easy terms.

I am anxious to know how far I am supported by other precedents, in asking the governors of the Derbyshire Infirmary to contribute the whole or a part of the sum required. Those of your readers who are connected with provincial hospitals will confer a favour if they will send to me answers to the following questions:—

1. Have you a medical library connected with the hospital?
2. How many books does it contain?
3. Is it supported out of the ordinary income of the charity?
4. Is there a fixed amount granted for the purchase of new books, and if so, how much?
5. How much per annum is spent?
6. Does the house-surgeon take pupils (*a*), and if so (*b*), is the premium paid in *whole* or in *part* to the charity?

By using the same numbers, the information that I need may be given in a single line. I have already replies from Northampton, Chester, Nottingham, Leicester, York, and Stafford. You will be interested to hear that all six have medical libraries, with an average of 1000 volumes in each. Five out of six receive a grant from the charity, and this averages more than £10 per annum.

It was very gratifying to see the tone which prevailed at Northampton, and I think it likely enough that the handsome library which is in the board (?) room is both a cause and an effect.

A favourable opportunity has occurred for bringing the subject under the notice of the governors in this county, and you will, I feel sure, approve the object sufficiently to give insertion to this letter.

To those of your readers who are able to help me by sending information, allow me to add—

"Bis dat, qui cito dat."

I remain, Sir, yours, &c.,

WILLIAM OGLE, M.A. & M.D.,
Physician to the Derbyshire Infirmary.

Derby, February, 1862.

Mr. Joseph Kain.—The proposal for removing St. Thomas's Hospital to any great distance from its present site would not meet with general support. The nearer the new hospital is to the present one the better, provided an eligible site can be obtained. The proposition that the medical officers of the new hospital should travel by railway to their daily duties is simply absurd.

S. A.—Bell and Co., Oxford-street; or Bullock and Reynolds, Hanover-street.

THE AMENDED MEDICAL ACT.

To the Editor of THE LANCET.

SIR,—I beg to suggest a single clause for addition to the Medical Acts, which would meet the requirements of the medical profession. It is to this effect:—"Any person, whose name does not appear on the Medical Register, visiting and prescribing or providing medicine for any medical or surgical disease, shall be construed to be 'wilfully and falsely pretending that he is recognised by law as a physician or surgeon, or licentiate in medicine and surgery, or a practitioner in medicine, or an apothecary,' within the meaning of Clause 40 of the Medical Act of August 2nd, 1858. Provided always that any person whose name does not so appear on the Medical Register, shall be entitled to claim exemption from the penalties of said Act, and to stay proceedings in any action at law, by producing in court a certificate from the Registrar of the General Council that he is entitled to be registered under the provisions of the Medical Act; and provided also that the Registrar of the General Council shall be bound to give such certificate on application, when satisfied that the person so applying is so entitled to be registered."

I am, Sir, yours obediently,

W. R.

February, 1862.

Pharmaceutist.—The American preparation of opium, known as M'Munn's, is generally believed to be an aqueous preparation of the drug, to which, after its completion, a very small amount of alcohol is added to prevent decomposition.

Punch.—1. Probably the latter.—2. The former.—3. It admits of considerable doubt.

POOR-LAW MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—I beg that you will permit me to suggest (through the medium of your journal) to the Poor-law medical officers and others who may be interested in Mr. Griffin's forthcoming struggle, that if 5000 medical men would send each 24 postage-stamps to Mr. Griffin, that that gentleman would have the sum of £500 to assist him in his untiring efforts on our behalf.

I also take this opportunity to express my conviction that a tariff of professional charges, as suggested by your correspondent, would be productive of incalculable benefit both to the profession and the public, and well worthy of the attention of our medical or ethical societies.

I remain, Sir, your obedient servant,

M.R.C.S.E., &c.

February, 1862.

Mr. Martin Perry, of Evesham, has forwarded to us a correspondence between himself and the Secretary of the London Life Association, who refuses to pay him the usual fee for a medical report on a life proposed for insurance, because "the Society had made no application to him for his opinion!" They had obtained the information, however, from Mr. Perry through the agency of his patient!

THE suggestion of *Mr. F. J. Burge* (Hammersmith) shall receive our consideration.

Surgeon.—Many practitioners are now in the habit of making out their accounts in the manner described by our correspondent.

THE EDINBURGH COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—The College of Physicians of Edinburgh will act with the greatest injustice to the present Licentiates by examination if they do not at once raise them to the rank of *Member*, as they undertook to do in a circular which they issued about two years ago. No fees ought to be required, as it is merely doing what they promised should be done when any alteration was made in the government of the College. Why does not the College get a new Charter, and confer the degree of M.D. as well as the Licence? It would then become the most popular medical institution in the kingdom, and bid defiance to all the Universities.

Your obedient servant,

A LICENTIATE.

February, 1862.

P.S.—In support of the latter suggestion, the following cannot too often appear before the profession—viz., the difference between Dr. Jones, and Jones, M.D. Are physicians doctors? Dr. Parsons says—Lord Chief Justice Coke considered Licentiates of the London College of Physicians as doctors of physic. He thus speaks of them in his dictum on Bonham's case: "Much was said in commendation of the doctors of physic of the College in London, and somewhat in derogation of the doctors of the Universities. He attributed much to the doctors of the said College," &c. So that in addition to the judgments of Ellenborough, Mansfield, and Denman, that physicians are doctors, we have the dictum of another legal don, Lord Chief Justice Coke.

Enquirer.—The Committee of the Medico-Chirurgical Society on Suspended Animation consists of the following gentlemen:—Dr. Williams, Dr. Kirkes, Dr. Brown-Séquard, Dr. Hyde Salter, Dr. Harley, Dr. Sanderson, and Mr. Savory.

Philo Logos Medicalis will find all the information he requires in any standard work on Medical Jurisprudence.

"MUTUAL ADVANTAGES."

To the Editor of THE LANCET.

SIR,—My attention has been called by some professional friends to the following advertisement:—

"To THE MEDICAL PROFESSION.—An old-established surgeon-dentist, possessing high testimonials, and practising in a fashionable locality, continues to attend patients in town or country, introduced by members of the medical profession, on mutual advantages.—Address, Confido, Standley's, Stationer, 64, New Bond-street, W."

As the address given is immediately opposite to my house, I beg your permission to state that the "surgeon dentist," whoever he may be, whose anxiety "to attend patients in town or country" has led him to resort to this expedient, which I think unprofessional and improper, certainly is not

Your obedient servant,

ADOLPHUS HART, M.R.C.S., L.D.S.

Brook-street, Hanover-square, Feb. 1862.

Mr. Richard Judge.—The information appears in the Students' Number of THE LANCET.

H. F. R.—It is a practice that we should not recommend, though it is not open to serious objection.

Vigilant.—The paper is a disgusting one; but we defer noticing it for the present.

Mr. B. C. Turgett.—It is intended that the advantages of the Association should extend to the country.

ALTHOUGH our present number is extended to ninety-six columns, we cannot find space for Mr. Ernest Hart's "Commentary on a Case of Intra-Orbitar Aneurism;" Dr. Lowe's "Case of Congenital Inversion of the Bladder;" the continuation of Mr. James P. West's "Observations on Injuries of the Head;" Reports of Medical Societies; and numerous advertisements.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Letheby; Mr. Henry Thompson; Dr. M'William; Mr. A. Hart; Mr. S. C. Reed; Mr. T. O. Walker; Dr. C. Young, Yarm; Mr. Skinner, North Tawton, (with enclosure;) Mr. J. T. Lipscomb, St. Albans; Mr. Hemming, Kimbolton, (with enclosure;) Mr. W. Spratt, Towcester, (with enclosure;) Mr. G. Wilson, Limerick, (with enclosure;) Mr. P. Whittington, Tuxford, (with enclosure;) Mr. Barber, Coventry; Mr. Lord, Boothfold; Mr. H. Robinson, Birmingham; Mr. D. Kelly, Manchester, (with enclosure;) Mr. P. E. D. Byrne, (with enclosure;) Mr. T. Constable, Cambridge; Dr. Eyding, Lymington; Mr. H. George; Dr. M. Mackenzie; Dr. Wadham; Mr. J. Kar; Mr. J. Gray, Plumstead; Mr. E. Ablett, Margate, (with enclosure;) Mr. C. Offer, Chertsey, (with enclosure;) Dr. Sansom, (with enclosure;) Mr. F. J. Gant; Dr. Brown, Rochester; Mr. F. J. Burge, Fulham; Mr. H. Lewis, (with enclosure;) Mr. W. B. Fletcher; Dr. Sargent, Lewench; Dr. G. Carter, Chudleigh; Mr. T. O. Pratt, Cardiff; Mr. Freeman; Mr. Wilde, Dublin; Mr. R. Storie, Thame, (with enclosure;) Mr. H. Rivers; Mr. S. D. Smith, Wallasea; Mr. G. West, (with enclosure;) Mr. S. Crompton, Belvidere; Mr. G. Wood, Ackworth; Mr. R. Ackland; Mr. T. Canaway, Algiers; Rev. H. M'Sorley, Tottenham; Mr. N. Seward, Cahercouish, (with enclosure;) Mr. J. Ray, Lowestoft; Mrs. Stevens; A Subscriber, (with enclosure;) M.R.C.S.; Royal Institution; F. T. B.; A. J. D.; X. Y. Z., Whitehaven, (with enclosure;) A Licentiate; W. B.; M.R.C.S., Crewkerne Observer; Medicus, (with enclosure;) &c.